AWARD/CONTRACT

1. This Contract Is A Rated Order Under DPAS (15 CFR 700)	Rating DOA4	Page 1 Of 106

2. Contract (Proc. Inst. Ident) No.	3. Effective Date	4. Requisition/Purchase Request/Project No.
W56HZV-07-D-0202	2007JUL02	SEE SCHEDULE

5. Issued By Code W56HZV

U.S. ARMY TACOM LCMC
AMSTA-AQ-ATB
DELORES TROTTER (586)753-6354
WARREN, MICHIGAN 48397-5000
HTTP://CONTRACTING.TACOM.ARMY.MIL

e-mail address: DELORES.V.JONES@US.ARMY.MIL

6. Administered By (If Other Than Item 5) Code SGR18A

DCMA SOUTHERN EUROPE
(GERMANY)
BOX 775, ATTN: DCMDI-GGD
APO, AE 09096

SCD C **PAS** NONE **ADP PT** HQ0339

7. Name And Address Of Contractor (No. Street, City, County, State, And Zip Code)

GENERAL DYNAMICS SANTA BARBARA SISTEMAS GMBH
BARBAROSSASTR. 30
KAISERSLAUTERN, DE
GERMANY 67655

TYPE BUSINESS: Foreign Concern/Entity

Code D9913 **Facility Code**

8. Delivery

☐ FOB Origin ☒ Other (See Below)

9. Discount For Prompt Payment

10. Submit Invoices (4 Copies Unless Otherwise Specified) To The Address Shown In: Item 12

11. Ship To/Mark For Code

SEE SCHEDULE

12. Payment Will Be Made By Code HQ0339

DFAS - COLUMBUS CENTER
DFAS-CO/WEST ENTITLEMENT OPERATIONS
P.O. BOX 182381
COLUMBUS, OH 43218-2381

13. Authority For Using Other Than Full And Open Competition:

☒ 10 U.S.C. 2304(c)(1) ☒ 41 U.S.C. 253(c)(1)

14. Accounting And Appropriation Data

15A. Item No.	15B. Schedule Of Supplies/Services	15C. Quantity	15D. Unit	15E. Unit Price	15F. Amount
SEE SCHEDULE	CONTRACT TYPE: Firm-Fixed-Price	KIND OF CONTRACT: Supply Contracts and Priced Orders			

Contract Expiration Date: 2013SEP30 **15G. Total Amount Of Contract** $0.00

16. Table Of Contents

(X)	Section	Description	Page(s)	(X)	Section	Description	Page(s)
		Part I - The Schedule				**Part II - Contract Clauses**	
X	A	Solicitation/Contract Form	1	X	I	Contract Clauses	96
X	B	Supplies or Services and Prices/Costs	4			**Part III - List Of Documents, Exhibits, And Other Attachments**	
X	C	Description/Specs./Work Statement	53	X	J	List of Attachments	106
X	D	Packaging and Marking	66			**Part IV - Representations And Instructions**	
X	E	Inspection and Acceptance	75		K	Representations, Certifications, and Other Statements of Offerors	
X	F	Deliveries or Performance	77				
X	G	Contract Administration Data	83		L	Instrs., Conds., and Notices to Offerors	
X	H	Special Contract Requirements	84		M	Evaluation Factors for Award	

Contracting Officer Will Complete Item 17 Or 18 As Applicable

17. ☐ **Contractor's Negotiated Agreement (Contractor is required to sign this document and return _____ copies to issuing office.) Contractor agrees to furnish and deliver all items or perform all the services set forth or otherwise identified above and on any continuation sheets for the consideration stated herein. The rights and obligations of the parties to this contract shall be subject to and governed by the following documents: (a) this award/contract, (b) the solicitation, if any, and (c) such provisions, representations, certifications, and specifications, as are attached or incorporated by reference herein. (Attachments are listed herein.)**

18. ☒ **Award (Contractor is not required to sign this document.) Your offer on Solicitation Number** W56HZV07R0063 **including the additions or changes made by you which additions or changes are set forth in full above, is hereby accepted as to the items listed above and on any continuation sheets. This award consummates the contract which consists of the following documents: (a) the Government's solicitation and your offer, and (b) this award/contract. No further contractual document is necessary.**

19A. Name And Title Of Signer (Type Or Print)

20A. Name Of Contracting Officer

LAWRENCE R. ELLENA
LARRY.ELLENA@US.ARMY.MIL (586)574-6952

19B. Name of Contractor	19c. Date Signed	20B. United States Of America	20C. Date Signed
By _____ (Signature of person authorized to sign)		By /SIGNED/ (Signature of Contracting Officer)	2007JUL02

SECTION A - SUPPLEMENTAL INFORMATION

	Regulatory Cite	Title	Date
A-1	52.204-4850 (TACOM)	ACCEPTANCE APPENDIX	MAR/2006

(a) Contract Number W56HZV-07-D-0202 is awarded to General Dynamics Santa Barbara Sistemas GmbH. The Government accepts your proposal dated 14 Jun 07 in response to Solicitation Number: W56HZV-07-R-0063, signed by Harry Walker, US Representative & PM of GDSBS.

(b) The contractor, in its proposal, provided data for various solicitation clauses, and that data has been added in this contract.

(c) Any attachments not included within this document will be provided by TACOM-Warren directly to the administrative contracting officer (ACO) via e-mail, as required. Technical data packages that are only available on CD-ROM will be mailed by TACOM-Warren to the ACO. Within one week of this award, any office not able to obtain attachments from TACOM's website (https://contracting.tacom.army.mil/) and still requiring a copy, can send an email request to the buyer listed on the front page of this contract.

W56HZV-07-D-0202

(d) The following Amendment(s) to the solicitation are incorporated into this contract: W56HZV-07-D-0202

[End of Clause]

A-2	52.201-4000 (TACOM)	TACOM-WARREN OMBUDSPERSON	JAN/2006

Information regarding the TACOM-Warren Ombudsperson is located at the website http://contracting.tacom.army.mil/acqinfo/ombudsperson.htm

[End of Clause]

THIS IS A REQUIREMENTS CONTRACT
Please refer to the Requirements Clause, 52.216-21, in Section I of this contract.

SUPPLIES OR SERVICES AND PRICES/COSTS:

IN THE FOUR DIGIT ITEM NUMBERS (CLINS) THAT FOLLOW,
THE NUMBERING SYSTEM THAT IS USED IS AS FOLLOWS:
THE SECOND, THIRD, AND FOURTH DIGITS SIGNIFY ITEM
AND THE FIRST DIGIT SIGNIFIES THE APPLICABLE ORDERING YEAR i.e.,
CLIN 1001 IS FOR THE FIRST ORDERING YEAR, FIRST ITEM
CLIN 2001 IS FOR THE SECOND ORDERING YEAR, FIRST ITEM
CLIN 3001 IS FOR THE THIRD ORDERING YEAR, FIRST ITEM - ETC.

CLINS 001, 002, ETC. APPLY TO ANY ORDERING YEAR

ALL ITEMS IDENTIFIED IN SECTION B SHALL BE MANUFACTURED IN ACCORDANCE WITH SECTION C.

THE FOLLOWING DEFINITIONS APPLY TO THE ENTIRE SOLICITATION AND RESULTING CONTRACT:

FIRST ORDERING YEAR OF THE CONTRACT IS AWARD OF CONTRACT THROUGH 30 SEPTEMBER 2007

SECOND ORDERING YEAR (OPTION) OF THE CONTRACT IS 01 OCTOBER 2007 THROUGH 30 SEPTEMBER 2008

THIRD ORDERING YEAR (OPTION) OF THE CONTRACT IS 01 OCTOBER 2008 THROUGH 30 SEPTEMBER 2009

FOURTH ORDERING YEAR (OPTION) OF THE CONTRACT IS 01 OCTOBER 2009 THROUGH 30 SEPTEMBER 2010

FIFTH ORDERING YEAR (OPTION) OF THE CONTRACT IS 01 OCTOBER 2010 THROUGH 30 SEPTEMBER 2011

SIXTH ODERING YEAR (OPTION) OF THE CONTRACT IS 01 OCTOBER 2011 THROUGH 30 SEPTEMBER 2012

SEVENTH ODERING YEAR (OPTION) OF THE CONTRACT IS 01 OCTOBER 2012 THROUGH 30 SEPTEMBER 2013

NOTE: THE PRICE APPLICABLE TO AN INDIVIDUAL ORDER IS THE PRICE FOR THE ORDERING YEAR IN WHICH THE ORDER IS ISSUED. THE DELIVERY DATE DOES NOT DETERMINE THE ORDERING YEAR.

EACH ORDERING YEAR'S QUANTITIES REPRESENT AN ESTIMATE ONLY. THE GOVERNMENT MAY ORDER FEWER OR MORE UNITS (SEE B PAGES).

OFFERORS MUST SUBMIT OFFERS ELECTRONICALLY IN ACCORDANCE WITH THE CLAUSE ENTITLED "ELECTRONIC OFFERS REQUIRED IN RESPONSE TO THIS SOLICITATION" . (SEE SECTION L.)

*** END OF NARRATIVE A0001 ***

*** END OF NARRATIVE A0002 ***

Name of Offeror or Contractor: GENERAL DYNAMICS SANTA BARBARA SISTEMAS GMBH

ITEM NO	SUPPLIES/SERVICES	QUANTITY	UNIT	UNIT PRICE	AMOUNT
	SECTION B - SUPPLIES OR SERVICES AND PRICES/COSTS				
1001	SECURITY CLASS: Unclassified				
1001AA	PRODUCTION QUANTITY This is a Requirements Contract. See paragraph I-107, 52.216-21 NSN: 5420-01-470-5824 Improved Ribbon Bridge (IRB) Interior Bay Quantities Represent Estimates Only. Shipping: Origin Inspection/Acceptance: Origin (End of narrative B001)	63	EA	$246,599	$ 15,535,737
	Packaging and Marking				
1002	SECURITY CLASS: Unclassified				
1002AA	PRODUCTION QUANTITY This is a Requirements Contract. See paragraph I-107, 52.216-21 NSN: 5420-01-470-5825 Improved Ribbon Bridge (IRB) Ramp Bay Quantities Represent Estimates Only. Shipping: Origin Inspection/Acceptance: Origin (End of narrative B001)	29	EA	$321,395	$ 9,320,455
	Packaging and Marking				

Name of Offeror or Contractor: GENERAL DYNAMICS SANTA BARBARA SISTEMAS GMBH

ITEM NO	SUPPLIES/SERVICES	QUANTITY	UNIT	UNIT PRICE	AMOUNT
1003	SECURITY CLASS: Unclassified				
1003AA	PRODUCTION QUANTITY This is a Requirements Contract. See paragraph I-107, 52.216-21 NSN: 5420-12-361-9933 Improved Ribbon Bridge (IRB) Ramp Bay Roadway Section, Left Quantities Represent Estimate Only Shipping: Origin Inspection/Acceptance: Origin (End of narrative B001)	1	EA	$ 89,669	$ 89,669
	Packaging and Marking				
1004	SECURITY CLASS: Unclassified				
1004AA	PRODUCTION QUANTITY This is a Requirements Contract. See paragraph I-107, 52.216-21 NSN: 5420-12-361-9934 Improved Ribbon Bridge (IRB) Ramp Bay Roadway Section, Right Quantity Represents Estimates Only. Shipping: Origin Inspection/Acceptance: Origin (End of narrative B001)	1	EA	$ 89,669	$ 89,669

Name of Offeror or Contractor: GENERAL DYNAMICS SANTA BARBARA SISTEMAS GMBH

ITEM NO	SUPPLIES/SERVICES	QUANTITY	UNIT	UNIT PRICE	AMOUNT
	Packaging and Marking				
1005	SECURITY CLASS: Unclassified				
1005AA	PRODUCTION QUANTITY This is a Requirements Contract. See paragraph I-107, 52.216-21 NSN: 5420-12-362-0727 Improved Ribbon Bridge (IRB) Ramp Left Outer Ponton Quantity Represents Estimate Only. Shipping: Origin Inspection/Acceptance: Origin	1	EA	$ 51,193	$ 51,193
	(End of narrative B001)				
	Packaging and Marking				
1006	SECURITY CLASS: Unclassified				
1006AA	PRODUCTION QUANTITY This is a Requirements Contract. See paragraph I-107, 52.216-21 NSN: 5420-12-361-9935 Improved Ribbon Bridge (IRB) Ramp Right Outer Ponton Quantity Represents Estimates Only. Shipping: Origin Inspection/Acceptance: Origin	1	EA	$ 51,193	$ 51,193

Name of Offeror or Contractor: GENERAL DYNAMICS SANTA BARBARA SISTEMAS GMBH

ITEM NO	SUPPLIES/SERVICES	QUANTITY	UNIT	UNIT PRICE	AMOUNT
	(End of narrative B001)				
	Packaging and Marking				
1007	SECURITY CLASS: Unclassified				
1007AA	PRODUCTION QUANTITY This is a Requirements Contract. See paragraph I-107, 52.216-21 NSN: 5420-12-361-9931 Improved Ribbon Bridge (IRB) Interior Bay Roadway Section, Left Quantity Represents Estimates Only. Shipping: Origin Inspection/Acceptance: Origin	1	EA	$ 71,847	$ 71,847
	(End of narrative B001)				
	Packaging and Marking				
1008	SECURITY CLASS: Unclassified				
1008AA	PRODUCTION QUANTITY This is a Requirements Contract. See paragraph I-107, 52.216-21 NSN: 5420-12-361-9931 Improved Ribbon Bridge (IRB) Interior Bay Roadway Section, Right Quantity Represents Estimate Only. Shipping: Origin	1	EA	$ 71,847	$ 71,847

Name of Offeror or Contractor: GENERAL DYNAMICS SANTA BARBARA SISTEMAS GMBH

ITEM NO	SUPPLIES/SERVICES	QUANTITY	UNIT	UNIT PRICE	AMOUNT
	Inspection/Acceptance: Origin (End of narrative B001) Packaging and Marking				
1009	SECURITY CLASS: Unclassified				
1009AA	PRODUCTION QUANTITY This is a Requirements Contract. See paragraph I-107, 52.216-21 NSN: 5420-12-361-9932 Improved Ribbon Bridge (IRB) Interior Bay Left Outer Ponton Section Quantity Represents Estimate Only. Packaging and handling costs are included in the unit price. Shipping: Origin Inspection/Acceptance: Origin (End of narrative B001) Packaging and Marking	1	EA	$ 50,862	$ 50,862
1010	SECURITY CLASS: Unclassified				
1010AA	PRODUCTION QUANTITY This is a Requirements Contract. See paragraph I-107, 52.216-21 NSN: 5420-12-361-9932 Improved Ribbon Bridge (IRB) Interior Bay Right Outer Ponton Section				

ITEM NO	SUPPLIES/SERVICES	QUANTITY	UNIT	UNIT PRICE	AMOUNT
		1	EA	$ 50,862	$ 50,862
	Quantity Represents Estimate Only. Packaging and handling costs are included in the unit price. Shipping: Origin Inspection/Acceptance: Origin (End of narrative B001) Packaging and Marking				
1011	SECURITY CLASS: Unclassified				
1011AA	SERVICE LINE ITEM This is a Requirements Contract. See paragraph I-107, 52.216-21 Effort for Anchoring System for the IRB of 210 Meters				
		1	EA	$ 277,149	$ 277,149
	Quantity Represents Estimate Only. Packaging and handling costs are included in the unit price. Shipping: Origin Inspection/Acceptance: Origin (End of narrative B001) Packaging and Marking				
1012	SECURITY CLASS: Unclassified				
1012AA	SERVICE LINE ITEM This is a Requirements Contract. See paragraph I-				

Name of Offeror or Contractor: GENERAL DYNAMICS SANTA BARBARA SISTEMAS GMBH

ITEM NO	SUPPLIES/SERVICES	QUANTITY	UNIT	UNIT PRICE	AMOUNT
	107, 52.216-21 Effort for Anchoring System for the IRB of 300 Meters Quantity Represents an Estimate Only. Packaging and handling costs are included in the unit price. Shipping: Origin Inspection/Acceptance: Origin (End of narrative B001) Packaging and Marking	1	EA	$ 50,060	$ 50,060
1013	SECURITY CLASS: Unclassified				
1013AA	SERVICE LINE ITEM This is a Requirements Contract. See paragraph I-107, 52.216-21 Parts Support for Fielding Quantity Represents an Estimate Only. Packaging and handling costs are included in the unit price. Currency exchange rate adjustment does not apply to DLA CLIN 1013AA. Shipping: Origin Inspection/Acceptance: Origin (End of narrative B001) Packaging and Marking	1	EA	$ 57,073	$ 57,073
1014	SECURITY CLASS: Unclassified				
1014AA	SERVICE LINE ITEM				

Name of Offeror or Contractor: GENERAL DYNAMICS SANTA BARBARA SISTEMAS GMBH

ITEM NO	SUPPLIES/SERVICES	QUANTITY	UNIT	UNIT PRICE	AMOUNT
	This is a Requirements Contract. See paragraph I-107, 52.216-21				
	IRB Fielding for Granit City, IL FY07				
	Fielding for one (1) unit consists of 30 interior Bays and 12 Ramp Bays.				
	a. Man Days (Deprocessing/Training), 85 man days (5 personnel)	85	DA	$ 789	$ 67,065
	b. Travel (Deprocessing/Training), 5 personnel	1	LO	$ 29,854	$ 29,854
	c. Training Manuals	1	LO	$ 4,586	$ 4,586
	d. ASL/PLL	1	LO	$ 21,467	$ 21,467
	e. Aluminum sheets	1	LO	$ 101	$ 101
	f. Special tools	1	LO	$ 2,602	$ 2,602
	g. Consumables	1	LO	$ 11	$ 11
	h. Transportation costs for d, e, f, and g	1	LO	$ 2,694	$ 2,694
	Quantities Eepresent an Estimate Only.				
	Inspection/Acceptance: Destination				
	(End of narrative B001)				
	Packaging and Marking				
2001	SECURITY CLASS: Unclassified				
	SECOND ORDERING YEAR (OPTION)				
	(End of narrative A001)				
2001AA	PRODUCTION QUANTITY				
	This is a Requirements Contract. See paragraph I-107, 52.216-21				
	NSN: 5420-01-470-5824				
	Improved Ribbon Bridge (IRB) Interior Bay	105	EA	$ 253,033	$ 26,568,465

Name of Offeror or Contractor: GENERAL DYNAMICS SANTA BARBARA SISTEMAS GMBH

ITEM NO	SUPPLIES/SERVICES	QUANTITY	UNIT	UNIT PRICE	AMOUNT
	Packaging and handling costs are included in the unit price. Quantities represent an estimate Only. Shipping: Origin Inspection/Acceptance: Origin (End of narrative B001) Packaging and Marking				
2002	SECURITY CLASS: Unclassified				
2002AA	PRODUCTION QUANTITY This is a Requirements Contract. See paragraph I-107, 52.216-21 NSN: 5420-01-470-5825 Improved Ribbon Bridge (IRB) Ramp Bay Quantities Represented are Estimates Only. Packaging and handling costs are included in the unit price. Shipping: Origin Inspection/Acceptance: Origin (End of narrative B001) Packaging and Marking	39	EA	$ 331,399	$ 12,924,561
2003	SECURITY CLASS: Unclassified				
2003AA	PRODUCTION QUANTITY This is a Requirements Contract. See paragraph I-107, 52.216-21				

Name of Offeror or Contractor: GENERAL DYNAMICS SANTA BARBARA SISTEMAS GMBH

ITEM NO	SUPPLIES/SERVICES	QUANTITY	UNIT	UNIT PRICE	AMOUNT
	NSN: 5420-12-361-9933 Improved Ribbon Bridge (IRB) Ramp Bay Roadway Section, Left Quantities Represented are Estimates Only. Packaging and handling costs are included in the unit price. Shipping: Origin Inspection/Acceptance: Origin (End of narrative B001) Packaging and Marking	1	EA	$ 93,094	$ 93,094
2004	SECURITY CLASS: Unclassified				
2004AA	PRODUCTION QUANTITY This is a Requirements Contract. See paragraph I-107, 52.216-21 NSN: 5420-12-361-9934 Improved Ribbon Bridge (IRB) Ramp Bay Roadway Section, Right Quantity Represented is an Estimates Only. Packaging and handling costs are included in the unit price. Shipping: Origin Inspection/Acceptance: Origin (End of narrative B001) Packaging and Marking	1	EA	$ 93,094	$ 93,094
2005	SECURITY CLASS: Unclassified				

Name of Offeror or Contractor: GENERAL DYNAMICS SANTA BARBARA SISTEMAS GMBH

ITEM NO	SUPPLIES/SERVICES	QUANTITY	UNIT	UNIT PRICE	AMOUNT
2005AA	PRODUCTION QUANTITY This is a Requirements Contract. See paragraph I-107, 52.216-21 NSN: 5420-12-362-0727 Improved Ribbon Bridge (IRB) Ramp Left Outer Ponton Quantity represented is an Estimate Only. Packaging and handling costs are included in the unit price. Shipping: Origin Inspection/Acceptance: Origin (End of narrative B001) Packaging and Marking	1	EA	$ 53,156	$ 53,156
2006	SECURITY CLASS: Unclassified				
2006AA	PRODUCTION QUANTITY This is a Requirements Contract. See paragraph I-107, 52.216-21 NSN: 5420-12-361-9935 Improved Ribbon Bridge (IRB) Ramp Right Outer Ponton Quantity Represented in an Estimate Only. Packaging and handling costs are included in the unit price. Shipping: Origin Inspection/Acceptance: Origin (End of narrative B001) Packaging and Marking	1	EA	$ 53,156	$ 53,156

Name of Offeror or Contractor: GENERAL DYNAMICS SANTA BARBARA SISTEMAS GMBH

ITEM NO	SUPPLIES/SERVICES	QUANTITY	UNIT	UNIT PRICE	AMOUNT
2007	SECURITY CLASS: Unclassified				
2007AA	PRODUCTION QUANTITY This is a Requirements Contract. See paragraph I-107, 52.216-21 NSN: 5420-12-361-9931 Improved Ribbon Bridge (IRB) Interior Bay Roadway Section, Left Quantity Represents an Estimate Only. Packaging and handling costs are included in the unit price. Shipping: Origin Inspection/Acceptance: Origin (End of narrative B001)	1	EA	$ 74,672	$ 74,672
	Packaging and Marking				
2008	SECURITY CLASS: Unclassified				
2008AA	PRODUCTION QUANTITY This is a Requirements Contract. See paragraph I-107, 52.216-21 NSN: 5420-12-361-9931 Improved Ribbon Bridge (IRB) Interior Bay Roadway Section, Right Quantity Represents an Estimate Only. Packaging and handling costs are included in the unit price. Shipping: Origin Inspection/Acceptance: Origin	1	EA	$ 74,672	$ 74,672

Name of Offeror or Contractor: GENERAL DYNAMICS SANTA BARBARA SISTEMAS GMBH

ITEM NO	SUPPLIES/SERVICES	QUANTITY	UNIT	UNIT PRICE	AMOUNT
	(End of narrative B001)				
	Packaging and Marking				
2009	SECURITY CLASS: Unclassified				
2009AA	PRODUCTION QUANTITY				
	This is a Requirements Contract. See paragraph I-107, 52.216-21 NSN: 5420-12-361-9932 Improved Ribbon Bridge (IRB) Interior Bay Left Outer Ponton Section Quantity Represents an Estimate Only. Packaging and handling costs are included in the unit price. Shipping: Origin Inspection/Acceptance: Origin	1	EA	$ 52,842	$ 52,842
	(End of narrative B001)				
	Packaging and Marking				
2010	SECURITY CLASS: Unclassified				
2010AA	PRODUCTION QUANTITY				
	This is a Requirements Contract. See paragraph I-107, 52.216-21 NSN: 5420-12-361-9932 Improved Ribbon Bridge (IRB) Interior Bay Right Outer Ponton Section Quantities Represented are Estimates Only. Packaging and handling costs are included in the unit	1	EA	$ 52,842	$ 52,842

ITEM NO	SUPPLIES/SERVICES	QUANTITY	UNIT	UNIT PRICE	AMOUNT
	price. Shipping: Origin Inspection/Acceptance: Origin (End of narrative B001) Packaging and Marking				
2011	SECURITY CLASS: Unclassified				
2011AA	SERVICES LINE ITEM This is a Requirements Contract. See paragraph I-107, 52.216-21 IRB fielding for Rolla, MO, FY08 Fielding for one (1) unit consists of 30 Interior Bays and 12 Ramp Bays. a. Man Days (Deprocessing/Training), 85 man days (5 personnel)	85	DA	$ 817	$ 69,445
	b. Travel (Deprocessing/Training), 5 personnel	1	LO	$ 32,181	$ 32,181
	c. Training Manuals	1	LO	$ 4,724	$ 4,724
	d. ASL/PLL	1	LO	$ 22,433	$ 22,433
	e. Aluminum sheets	1	LO	$ 106	$ 106
	f. Special tools	1	LO	$ 2,719	$ 2,719
	g. Consumables	1	LO	$ 11	$ 11
	h. Transportation costs for d, e, f, and g	1	LO	$ 2,829	$ 2,829
	Quantities Represented are Estimates Only. Inspection/Acceptance: Destination (End of narrative B001)				
2012	SECURITY CLASS: Unclassified				

Name of Offeror or Contractor: GENERAL DYNAMICS SANTA BARBARA SISTEMAS GMBH

ITEM NO	SUPPLIES/SERVICES	QUANTITY	UNIT	UNIT PRICE	AMOUNT
2012AA	SERVICES LINE ITEM				
	This is a Requirements Contract. See paragraph I-107, 52.216-21				
	IRB Fielding for Bismark, ND, FY08				
	Fielding for (1) unit consists of 30 Inerior Bays and 12 Ramp Bays.				
	a. Man Days (Deprocessing/Training), 85 man days (5 personnel)	85	DA	$ 817	$ 69,445
	b. Travel (Deprocessing/Training), 5 personnel	1	LO	$ 37,171	$ 37,171
	c. Training Manuals	1	LO	$ 4,724	$ 4,724
	d. ASL/PLL	1	LO	$ 22,433	$ 22,433
	e. Aluminum sheets	1	LO	$ 106	$ 106
	f. Special tools	1	LO	$ 2,719	$ 2,719
	g. Consumables	1	LO	$ 11	$ 11
	h. Transportation costs for d, e, f, and g	1	LO	$ 2,829	$ 2,829
	Quantities Represented are Estimated Only.				
	Inspection/Acceptance: Destination				
	(End of narrative B001)				
2013	SECURITY CLASS: Unclassified				
2013AA	SERVICES LINE ITEM				
	This is a Requirements Contract. See paragraph I-107, 52.216-21				
	IRB Fielding for Rock Springs, WY, FY08				
	Fielding for one (1) unit consists of 30 Interior Bays and 12 Ramp Bays.				
	a. Man Days (Deprocessing/Training), 85 man days (5 personnel)	85	DA	$ 817	$ 69,445

Name of Offeror or Contractor: GENERAL DYNAMICS SANTA BARBARA SISTEMAS GMBH

ITEM NO	SUPPLIES/SERVICES	QUANTITY	UNIT	UNIT PRICE	AMOUNT
	b. Travel (Deprocessing/Training), 5 personnel	1	LO	$ 30,036	$ 30,036
	c. Training Manuals	1	LO	$ 4,724	$ 4,724
	d. ASL/PLL	1	LO	$ 22,433	$ 22,433
	e. Aluminum sheets	1	LO	$ 106	$ 106
	f. Special tools	1	LO	$ 2,719	$ 2,719
	g. Consumables	1	LO	$ 11	$ 11
	h. Transportation costs for d, e, f, and g	1	LO	$ 2,829	$ 2,829
	Quantities Represented are Estimates Only. Inspection/Acceptance: Destination (End of narrative B001)				
3001	SECURITY CLASS: Unclassified THIRD ORDERING YEAR (OPTION) (End of narrative A001)				
3001AA	PRODUCTION QUANTITY This is a Requirements Contract. See paragraph I-107, 52.216-21 NSN: 5420-01-470-5824 Improved Ribbon Bridge (IRB) Interior Bay	90	EA	$ 264,709	$ 23,823,810
	Quantities Represented are Estimates Only. Packaging and handling costs are included in the unit price. Shipping: Origin Inspection/Acceptance: Origin (End of narrative B001)				

Name of Offeror or Contractor: GENERAL DYNAMICS SANTA BARBARA SISTEMAS GMBH

ITEM NO	SUPPLIES/SERVICES	QUANTITY	UNIT	UNIT PRICE	AMOUNT
	Packaging and Marking				
3002	SECURITY CLASS: Unclassified				
3002AA	PRODUCTION QUANTITY This is a Requirements Contract. See paragraph I-107, 52.216-21 NSN: 5420-01-470-5825 Improved Ribbon Bridge (IRB) Ramp Bay Quantities Represented are Estimates Only. Packaging and handling costs are included in the unit price. Shipping: Origin Inspection/Acceptance: Origin (End of narrative B001)	36	EA	$ 345,138	$ 12,424,968
	Packaging and Marking				
3003	SECURITY CLASS: Unclassified				
3003AA	PRODUCTION QUANTITY This is a Requiremtns Contract. See paragraph I-017, 52.216-21 NSN: 5420-12-361-9933 Improved Ribbon Bridge (IRB) Ramp Bay Roadway Section, Left Quantity Represented are Estimates Only. Packaging and handling costs are included in the unit price. Shipping: Origin Inspection/Acceptance: Origin	1	EA	$ 96,753	$ 96,753

Name of Offeror or Contractor: GENERAL DYNAMICS SANTA BARBARA SISTEMAS GMBH

ITEM NO	SUPPLIES/SERVICES	QUANTITY	UNIT	UNIT PRICE	AMOUNT
	(End of narrative B001)				
	Packaging and Marking				
3004	SECURITY CLASS: Unclassified				
3004AA	PRODUCTION QUANTITY This is a Requirements Contract. See paragraph I-107, 52.216-21. NSN: 5420-12-361-9934 Improved Ribbon Bridge (IRB) Ramp Bay Roadway Section, Right Quantities Represented are Estimates Only. Packaging and handling costs are included in the unit price. Shipping: Origin Inspection/Acceptance: Origin	1	EA	$ 96,753	$ 96,753
	(End of narrative B001)				
	Packaging and Marking				
3005	SECURITY CLASS: Unclassified				
3005AA	SERVICES LINE ITEM This is a Requirements Contract. See paragraph I-107, 52.216-21. NSN: 5420-12-362-0727 Improved Ribbon Bridge (IRB) Ramp Left Outer Ponton Quantities Represented are Estimates Only.	1	EA	$ 55,281	$ 55,281

Name of Offeror or Contractor: GENERAL DYNAMICS SANTA BARBARA SISTEMAS GMBH

ITEM NO	SUPPLIES/SERVICES	QUANTITY	UNIT	UNIT PRICE	AMOUNT
	Packaging and handling costs are included in the unit price. Shipping: Origin Inspection/Acceptance: Origin (End of narrative B001)				
3006	SECURITY CLASS: Unclassified				
3006AA	PRODUCTION QUANTITY This is a Requirements Contract. See paragraph I-107, 52.216-21. NSN: 5420-12-361-9935 Improved Ribbon Bridge (IRB) Ramp Right Outer Ponton Quantities Represented are Estimates Only. Packaging and handling costs are included in the unit price. Shipping: Origin Inspection/Acceptance: Origin (End of narrative B001)	1	EA	$ 55,281	$ 55,281
	Packaging and Marking				
3007	SECURITY CLASS: Unclassified				
3007AA	PRODUCTION QUANTITY This is a Requirements Contract. See paragraph I-107, 52.216-21. NSN: 5420-12-361-9931 Improved Ribbon Bridge (IRB) Interior Bay Roadway Section, Left				

Name of Offeror or Contractor: GENERAL DYNAMICS SANTA BARBARA SISTEMAS GMBH

ITEM NO	SUPPLIES/SERVICES	QUANTITY	UNIT	UNIT PRICE	AMOUNT
		1	EA	$ 77,698	$ 77,698
	Quantities Represented are Estimates Only. Packaging and handling costs are included in the unit price. Shipping: Origin Inspection/Acceptance: Origin (End of narrative B001)				
	Packaging and Marking				
3008	SECURITY CLASS: Unclassified				
3008AA	PRODUCTION QUANTITY				
	This is a Requirements Contract. See paragraph I-107, 52.216-21. NSN: 5420-12-361-9931 Improved Ribbon Bridge (IRB) Interior Bay Roadway Section, Right				
		1	EA	$ 77,698	$ 77,698
	Quantities Represented are Estimates Only Packaging and handling costs are included in the unit price. Shipping: Origin Inspection/Acceptance: Origin (End of narrative B001)				
	Packaging and Marking				
3009	SECURITY CLASS: Unclassified				
3009AA	PRODUCTION QUANTITY				

Name of Offeror or Contractor: GENERAL DYNAMICS SANTA BARBARA SISTEMAS GMBH

ITEM NO	SUPPLIES/SERVICES	QUANTITY	UNIT	UNIT PRICE	AMOUNT
	This is a Requirements Contract. See paragraph I-107, 52.216-21 NSN: 5420-12-361-9932 Improved Ribbon Bridge (IRB) Interior Bay Left Outer Ponton Section Quantities Represented are Estimates Only Packaging and handling costs are included in the unit price. Shipping: Origin Inspection/Acceptance: Origin (End of narrative B001) Packaging and Marking	1	EA	$ 54,982	$ 54,982
3010	SECURITY CLASS: Unclassified				
3010AA	PRODUCTION QUANTITY This is a Requirements Contract. See paragraph I-107, 52.216-21. NSN: 5420-12-361-9932 Improved Ribbon Bridge (IRB) Interior Bay Right Outer Ponton Section Quantities Represented are Estimates Only Packaging and handling costs are included in the unit price. Shipping: Origin Inspection/Acceptance: Origin (End of narrative B001) Packaging and Marking	1	EA	$ 54,982	$ 54,982
3011	SECURITY CLASS: Unclassified				

Name of Offeror or Contractor: GENERAL DYNAMICS SANTA BARBARA SISTEMAS GMBH

ITEM NO	SUPPLIES/SERVICES	QUANTITY	UNIT	UNIT PRICE	AMOUNT
3011AA	PRODUCTION QUANTITY This is a Requirements Contract. See paragraph I-017, 52.216-21. IRB Fielding for Trzwell, VA, FY09 Fielding for one (1) unit consists of 30 Interior Bays and 12 Ramp Bays. a. Man Days (Deprocessing/Training), 85 man days (5 personnel)	85	DA	$ 846	$ 71,910
	b. Travel (Deprocessing/Training), 5 personnel	1	LO	$ 37,584	$ 37,584
	c. Training Manuals	1	LO	$ 4,865	$ 4,865
	d. ASL/PLL	1	LO	$ 23,442	$ 23,442
	e. Aluminum sheets	1	LO	$ 110	$ 110
	f. Special tools	1	LO	$ 2,841	$ 2,841
	g. Consumables	1	LO	$ 12	$ 12
	h. Transportation costs for d, e, f, and g	1	LO	$ 2,971	$ 2,971
	Quantities Represented are Estimates Only Inspection/Acceptance: Destination (End of narrative B001) Packaging and Marking				
3012	SECURITY CLASS: Unclassified				
3012AA	SERVICE LINE ITEM This is a Requirements Contract. See paragraph I-107, 52.216-21. IRB fielding for Danielson, CT, FY09 a. Man Days (Deprocessing/Training), 85 man days (5 personnel)				

ITEM NO	SUPPLIES/SERVICES	QUANTITY	UNIT	UNIT PRICE	AMOUNT
		85	DA	$ 846	$ 71,910
	b. Travel (Deprocessing/Training), 5 personnel	1	LO	$ 28,982	$ 28,982
	c. Training Manuals	1	LO	$ 4,865	$ 4,865
	d. ASL/PLL	1	LO	$ 23,442	$ 23,442
	e. Aluminum sheets	1	LO	$ 110	$ 110
	f. Special tools	1	LO	$ 2,841	$ 2,841
	g. Consumables	1	LO	$ 12	$ 12
	h. Transportation costs for d, e, f, and g	1	LO	$ 2,971	$ 2,971
	Quantities Represented are Estimates Only				
	Inspection/Acceptance: Destination				
	(End of narrative B001)				
	Packaging and Marking				
3013	SECURITY CLASS: Unclassified				
3013AA	SERVICES LINE ITEM				
	This is a Requirements Contract. See paragraph I-107, 52.216-21.				
	IRB Fielding for Norman, OK, FY09				
	Fielding for one (1) unit consists of 30 Interior Bays and 12 Ramp Bays.				
	a. Man Days (Deprocessing/Training), 85 man days (5 personnel)	85	DA	$ 846	$ 71,910
	b. Travel (Deprocessing/Training), 5 personnel	1	LO	$ 28,414	$ 28,414
	c. Training Manuals	1	LO	$ 4,865	$ 4,865
	d. ASL/PLL	1	LO	$ 23,442	$ 23,442
	e. Aluminum sheets	1	LO	$ 110	$ 110
	f. Special tools	1	LO	$ 2,841	$ 2,841
	g. Consumables	1	LO	$ 12	$ 12
	h. Transportation costs for d, e, f, and g				

ITEM NO	SUPPLIES/SERVICES	QUANTITY	UNIT	UNIT PRICE	AMOUNT
		1	LO	$ 2,971	$ 2,971
	Quantities Represented are Estimates Only Inspection/Acceptance: Destination (End of narrative B001)				
3014	SECURITY CLASS: Unclassified				
3014AA	SERVICES LINE ITEM This is a Requirements Contract. See paragraph I-017, 52.216-21 IRB Fielding for Marrero, LA, FY09 Fielding for one (1) unit consists of 30 Interior Bays and 12 Ramp Bays. a. Man Days (Deprocessing/Training), 85 man days (5 personnel)	85	DA	$ 846	$ 71,910
	b. Travel (Deprocessing/Training), 5 personnel	1	LO	$ 36,286	$ 36,286
	c. Training Manuals	1	LO	$ 4,865	$ 4,865
	d. ASL/PLL	1	LO	$ 23,442	$ 23,442
	e. Aluminum sheets	1	LO	$ 110	$ 110
	f. Special tools	1	LO	$ 2,841	$ 2,841
	g. Consumables	1	LO	$ 12	$ 12
	h. Transportation costs for d, e, f, and g	1	LO	$ 2,971	$ 2,971
	Quantities Represented are Estimates Only Inspection/Acceptance: Destination (End of narrative B001)				
4001	SECURITY CLASS: Unclassified				

ITEM NO	SUPPLIES/SERVICES	QUANTITY	UNIT	UNIT PRICE	AMOUNT
	FOURTH ORDERING YEAR (OPTION) (End of narrative A001)				
4001AA	PRODUCTION QUANTITY This is a Requirements Contract. See paragraph I-107, 52.216-21. NSN: 5420-01-470-5824 Improved Ribbon Bridge (IRB) Interior Bay Quantities Represented are Estimates Only Packaging and handling costs are included in the unit price. Shipping: Origin Inspection/Acceptance: Origin	90	EA	$ 275,178	$ 24,766,020
	(End of narrative B001)				
	Packaging and Marking				
4002	SECURITY CLASS: Unclassified				
4002AA	PRODUCTION QUANTITY This is a Requirements Contract. See paragraph I-107, 52.216-21. NSN: 5420-01-470-5825 Improved Ribbon Bridge (IRB) Ramp Bay Quantities Represented are Estimates Only Packaging and handling costs are included in the unit price. Shipping: Origin Inspection/Acceptance: Origin	36	EA	$ 358,725	$ 12,914,100

Name of Offeror or Contractor: GENERAL DYNAMICS SANTA BARBARA SISTEMAS GMBH

ITEM NO	SUPPLIES/SERVICES	QUANTITY	UNIT	UNIT PRICE	AMOUNT
	(End of narrative B001)				
	Packaging and Marking				
4003	SECURITY CLASS: Unclassified				
4003AA	PRODUCTION QUANTITY				
	This is a Requirements Contract. See paragraph I-107, 52.216-21. NSN: 5420-12-361-9933 Improved Ribbon Bridge (IRB) Ramp Bay Roadway Section, Left Quantities Represented are Estimates Only Packaging and handling costs are included in the unit price. Shipping: Origin Inspection/Acceptance: Origin	1	EA	$ 100,552	$ 100,552
	(End of narrative B001)				
	Packaging and Marking				
4004	SECURITY CLASS: Unclassified				
4004AA	PRODUCTION QUANTITY				
	This is a Requirements Contract. See paragraph I-107, 52.216-21. NSN: 5420-12-361-9934 Improved Ribbon Bridge (IRB) Ramp Bay Roadway Section, Right Quantities Represented are Estimates Only. Packaging and handling costs are included in the unit price.	1	EA	$ 100,552	$ 100,552

ITEM NO	SUPPLIES/SERVICES	QUANTITY	UNIT	UNIT PRICE	AMOUNT
	Shipping: Origin Inspection/Acceptance: Origin (End of narrative B001) Packaging and Marking				
4005	SECURITY CLASS: Unclassified				
4005AA	PRODUCTION QUANTITY This is a Requirements Contract. See paragraph I-107, 52.216-21. NSN: 5420-12-362-0727 Improved Ribbon Bridge (IRB) Ramp Left Outer Ponton Quantities Represented are Estimates Only Packaging and handling costs are included in the unit price. Shipping: Origin Inspection/Acceptance: Origin (End of narrative B001) Packaging and Marking	1	EA	$ 57,493	$ 57,493
4006	SECURITY CLASS: Unclassified				
4006AA	PRODUCTION QUANTITY This is a Requirements Contract. See paragraph I-107, 52.216-21. NSN: 5420-12-361-9935 Improved Ribbon Bridge (IRB) Ramp Right Outer Ponton				

Name of Offeror or Contractor: GENERAL DYNAMICS SANTA BARBARA SISTEMAS GMBH

ITEM NO	SUPPLIES/SERVICES	QUANTITY	UNIT	UNIT PRICE	AMOUNT
		1	EA	$ 57,493	$ 57,493
	Quantities Represented are Estimates Only Packaging and handling costs are included in the unit price. Shipping: Origin Inspection/Acceptance: Origin (End of narrative B001)				
	Packaging and Marking				
4007	SECURITY CLASS: Unclassified				
4007AA	PRODUCTION QUANTITY				
	This is a Requirements Contract. See paragraph I-107, 52.216-21. NSN: 5420-12-361-9931 Improved Ribbon Bridge (IRB) Interior Bay Roadway Section, Left				
		1	EA	$ 80,848	$ 80,848
	Quantities Represented are Estimates Only Packaging and handling costs are included in the unit price. Shipping: Origin Inspection/Acceptance: Origin (End of narrative B001)				
	Packaging and Marking				
4008	SECURITY CLASS: Unclassified				
4008AA	PRODUCTION QUANTITY				

Name of Offeror or Contractor: GENERAL DYNAMICS SANTA BARBARA SISTEMAS GMBH

ITEM NO	SUPPLIES/SERVICES	QUANTITY	UNIT	UNIT PRICE	AMOUNT
	This is a Requirements Contract. See parapgraph I-107, 52.216-21. NSN: 5420-12-361-9931 Improved Ribbon Bridge (IRB) Interior Bay Roadway Section, Right Quantities Represented are Estimates Only. Packaging and handling costs are included in the unit price. Shipping: Origin Inspection/Acceptance: Origin (End of narrative B001) Packaging and Marking	1	EA	$ 80,848	$ 80,848
4009	SECURITY CLASS: Unclassified				
4009AA	PRODUCTION QUANTITY This is a Requirements Contract. See paragraph I-107, 52.216-21. NSN: 5420-12-361-9932 Improved Ribbon Bridge (IRB) Interior Bay Left Outer Ponton Section Quantities Represented are Estimates Only. Packaging and handling costs are included in the unit price. Shipping: Origin Inspection/Acceptance: Origin (End of narrative B001) Packaging and Marking	1	EA	$ 57,213	$ 57,213
4010	SECURITY CLASS: Unclassified				

Name of Offeror or Contractor: GENERAL DYNAMICS SANTA BARBARA SISTEMAS GMBH

ITEM NO	SUPPLIES/SERVICES	QUANTITY	UNIT	UNIT PRICE	AMOUNT
4010AA	PRODUCTION QUANTITY				
	This is a Requirements Contract. See paragraph I-107, 52.216-21.				
	NSN: 5420-12-361-9932				
	Improved Ribbon Bridge (IRB) Interior Bay Right Outer Ponton Section				
	Quantities Represented are Estimates Only.	1	EA	$ 57,213	$ 57,213
	Packaging and handling costs are included in the unit price.				
	Shipping: Origin				
	Inspection/Acceptance: Origin				
	(End of narrative B001)				
	Packaging and Marking				
4011	SECURITY CLASS: Unclassified				
4011AA	SERVICES LINE ITEM				
	This is a Requirements Contract. See paragraph I-107, 52.216-21.				
	IRB Fielding for Ft. Benning, GA, FY10				
	Fielding for one (1) unit consists of 30 Interior Bays and 12 Ramp Bays.				
	a. Man Days (Deprocessing/Training), 85 man days (5 personnel)	85	DA	$ 876	$ 74,460
	b. Travel (Deprocessing/Training), 5 personnel	1	LO	$ 40,634	$ 40,634
	c. Training Manuals	1	LO	$ 5,006	$ 5,006
	d. ASL/PLL	1	LO	$ 24,497	$ 24,497
	e. Aluminum sheets	1	LO	$ 115	$ 115
	f. Special tools	1	LO	$ 2,969	$ 2,969

Name of Offeror or Contractor: GENERAL DYNAMICS SANTA BARBARA SISTEMAS GMBH

ITEM NO	SUPPLIES/SERVICES	QUANTITY	UNIT	UNIT PRICE	AMOUNT
	g. Consumables	1	LO	$ 12	$ 12
	h. Transportation costs for d, e, f, and g	1	LO	$ 3,120	$ 3,120
	Quantities Represented are Estimates Only Inspection/Acceptance: Destination (End of narrative B001)				
4012	SECURITY CLASS: Unclassified				
4012AA	SERVICES LINE ITEM This is a Requirements Contract. See paragraph I-107, 52.216-21. IRB Fielding for Redding, CA, FY10 Fielding for one (1) unit consists of 30 Interior Bays and 12 Ramp Bays. a. Man Days (Deprocessing/Training), 85 man days (5 personnel)	85	DA	$ 876	$ 74,460
	b. Travel (Deprocessing/Training), 5 personnel	1	LO	$ 38,204	$ 38,204
	c. Training Manuals	1	LO	$ 5,006	$ 5,006
	d. ASL/PLL	1	LO	$ 24,497	$ 24,497
	e. Aluminum sheets	1	LO	$ 115	$ 115
	f. Special tools	1	LO	$ 2,969	$ 2,969
	g. Consumables	1	LO	$ 12	$ 12
	h. Transportation costs for d, e, f, and g	1	LO	$ 3,120	$ 3,120
	Quantities Represented are Estimates Only. Inspection/Acceptance: Destination (End of narrative B001)				

Name of Offeror or Contractor: GENERAL DYNAMICS SANTA BARBARA SISTEMAS GMBH

ITEM NO	SUPPLIES/SERVICES	QUANTITY	UNIT	UNIT PRICE	AMOUNT
5001	SECURITY CLASS: Unclassified FIFTH ORDERING YEAR (OPTION) (End of narrative A001)				
5001AA	PRODUCTION QUANTITY This is a Requirements Contract. See paragraph I-107, 52.216-21. NSN: 5420-01-470-5824 Improved Ribbon Bridge (IRB) Interior Bay Quantities Represent Estimates Only. Packaging and handling costs are included in the unit price. Shipping: Origin Inspection/Acceptance: Origin (End of narrative B001)	73	EA	$ 287,879	$ 21,015,167
	Packaging and Marking				
5002	SECURITY CLASS: Unclassified				
5002AA	PRODUCTION QUANTITY This is a Requirements Contract. See paragraph I-107, 52.216-21. NSN: 5420-01-470-5825 Improved Ribbon Bridge (IRB) Ramp Bay Quantities Represent Estimates Only. Packaging and handling costs are included in the unit price.	30	EA	$ 374,468	$ 11,234,040

Name of Offeror or Contractor: GENERAL DYNAMICS SANTA BARBARA SISTEMAS GMBH

ITEM NO	SUPPLIES/SERVICES	QUANTITY	UNIT	UNIT PRICE	AMOUNT
	Shipping: Origin Inspection/Acceptance: Origin (End of narrative B001) Packaging and Marking				
5003	SECURITY CLASS: Unclassified				
5003AA	PRODUCTION QUANTITY This is a Requirements Contract. See paragraph I-107, 52.216-21. NSN: 5420-12-361-9933 Improved Ribbon Bridge (IRB) Ramp Bay Roadway Section, Left Quantity Represents an Estimate Only. Packaging and handling costs are included in the unit price. Shipping: Origin Inspection/Acceptance: Origin (End of narrative B001) Packaging and Marking	1	EA	$ 104,516	$ 104,516
5004	SECURITY CLASS: Unclassified				
5004AA	PRODUCTION QUANTITY This is a Requirements Contract. See paragraph I-107, 52.216-21. NSN: 5420-12-361-9934 Improved Ribbon Bridge (IRB) Ramp Bay Roadway				

Name of Offeror or Contractor: GENERAL DYNAMICS SANTA BARBARA SISTEMAS GMBH

ITEM NO	SUPPLIES/SERVICES	QUANTITY	UNIT	UNIT PRICE	AMOUNT
	Section, Right Quantity represents an Estimate Only. Packaging and handling costs are included in the unit price. Shipping: Origin Inspection/Acceptance: Origin (End of narrative B001)	1	EA	$ 104,516	$ 104,516
	Packaging and Marking				
5005	SECURITY CLASS: Unclassified				
5005AA	PRODUCTION QUANTITY This is a Requirements Contract. See paragraph I-107, 52.216-21. NSN: 5420-12-362-0727 Improved Ribbon Bridge (IRB) Ramp Left Outer Ponton Quantity Represents an Estimate Only. Packaging and handling costs are included in the unit price. Shipping: Origin Inspection/Acceptance: Origin (End of narrative B001)	1	EA	$ 59,801	$ 59,801
	Packaging and Marking				
5006	SECURITY CLASS: Unclassified				
5006AA	PRODUCTION QUANTITY This is a Requirements Contract. See paragraph I-				

ITEM NO	SUPPLIES/SERVICES	QUANTITY	UNIT	UNIT PRICE	AMOUNT
	107, 52.216-21. NSN: 5420-12-361-9935 Improved Ribbon Bridge (IRB) Ramp Right Outer Ponton Quantity Represents an Estimate Only. Packaging and handling costs are included in the unit price. Shipping: Origin Inspection/Acceptance: Origin (End of narrative B001)	1	EA	$ 59,801	$ 59,801
	Packaging and Marking				
5007	SECURITY CLASS: Unclassified				
5007AA	PRODUCTION QUANTITY This is a Requirements Contract. See paragraph I-107, 52.216-21. NSN: 5420-12-361-9931 Improved Ribbon Bridge (IRB) Interior Bay Roadway Section, Left Quantity Represents an Estimate Only. Packaging and handling costs are included in the unit price. Shipping: Origin Inspection/Acceptance: Origin (End of narrative B001)	1	EA	$ 84,151	$ 84,151
	Packaging and Marking				
5008	SECURITY CLASS: Unclassified				
5008AA	PRODUCTION QUANTITY				

Name of Offeror or Contractor: GENERAL DYNAMICS SANTA BARBARA SISTEMAS GMBH

ITEM NO	SUPPLIES/SERVICES	QUANTITY	UNIT	UNIT PRICE	AMOUNT
	This is a Requirements Contract. See paragraph I-107, 52,216-21. NSN: 5420-12-361-9931 Improved Ribbon Bridge (IRB) Interior Bay Roadway Section, Right Quantity Represents an Estimate Only. Packaging and handling costs are included in the unit price. Shipping: Origin Inspection/Acceptance: Origin (End of narrative B001)	1	EA	$ 84,151	$ 84,151
	Packaging and Marking				
5009	SECURITY CLASS: Unclassified				
5009AA	PRODUCTION QUANTITY This is a Requirements Contract. See paragraph I-107, 52.216-21. NSN: 5420-12-361-9932 Improved Ribbon Bridge (IRB) Interior Bay Left Outer Ponton Section Quantity Represents an Estimate Only. Packaging and handling costs are included in the unit price. Shipping: Origin Inspection/Acceptance: Origin (End of narrative B001)	1	EA	$ 59,555	$ 59,555
	Packaging and Marking				
5010	SECURITY CLASS: Unclassified				

Name of Offeror or Contractor: GENERAL DYNAMICS SANTA BARBARA SISTEMAS GMBH

ITEM NO	SUPPLIES/SERVICES	QUANTITY	UNIT	UNIT PRICE	AMOUNT
5010AA	PRODUCTION QUANTITY This is a Requirements Contract. See paragraph I-107, 52.216-21. NSN: 5420-12-361-9932 Improved Ribbon Bridge (IRB) Interior Bay Right Outer Ponton Section	1	EA	$ 59,555	$ 59,555
	Quantity Represents an Estimate Only. Packaging and handling costs are included in the unit price. Shipping: Origin Inspection/Acceptance: Origin (End of narrative B001)				
	Packaging and Marking				
5011	SECURITY CLASS: Unclassified				
5011AA	SERVICES LINE ITEM This is a Requirements Contract. See paragraph I-107, 52.216-21. IRB Fielding for El Campo, TX, FY11 Fielding for one (1) unit consists of 30 Interior Bays and 12 Ramp Bays. a. Man Days (Deprocessing/Training), 85 man days (5 personnel)	85	DA	$ 906	$ 77,010
	b. Travel (Deprocessing/Training), 5 personnel	1	LO	$ 37,336	$ 37,336
	c. Training Manuals	1	LO	$ 5,147	$ 5,147
	d. ASL/PLL	1	LO	$ 25,600	$ 25,600
	e. Aluminum sheets	1	LO	$ 120	$ 120
	f. Special tools	1	LO	$ 3,102	$ 3,102
	g. Consumables				

Name of Offeror or Contractor: GENERAL DYNAMICS SANTA BARBARA SISTEMAS GMBH

ITEM NO	SUPPLIES/SERVICES	QUANTITY	UNIT	UNIT PRICE	AMOUNT
		1	LO	$ 13	$ 13
	h. Transportation costs for d, e, f, and g	1	LO	$ 3,275	$ 3,275
	Quantities Represent Estimates only.				
	Inspection/Acceptance: Destination				
	(End of narrative B001)				
5012	SECURITY CLASS: Unclassified				
5012AA	SERVICES LINE ITEM				
	This is a Requirements Contract. See paragraph I-107, 52.216-21.				
	IRB Fielding for Ft. Worth, TX, FY11				
	Fielding for one (1) unit consists of 30 Interior Bays and 12 Ramp Bays.				
	a. Man Days (Deprocessing/Training), 85 man days (5 personnel)	85	DA	$ 906	$ 77,010
	b. Travel (Deprocessing/Training), 5 personnel	1	LO	$ 35,973	$ 35,973
	c. Training Manuals	1	LO	$ 5,147	$ 5,147
	d. ASL/PLL	1	LO	$ 25,600	$ 25,600
	e. Aluminum sheets	1	LO	$ 120	$ 120
	f. Special tools	1	LO	$ 3,102	$ 3,102
	g. Consumables	1	LO	$ 13	$ 13
	h. Transportation costs for d, e, f, and g	1	LO	$ 3,275	$ 3,275
	Quantities Represent Estimates Only.				
	Inspection/Acceptance: Destination				
	(End of narrative B001)				

Name of Offeror or Contractor: GENERAL DYNAMICS SANTA BARBARA SISTEMAS GMBH

ITEM NO	SUPPLIES/SERVICES	QUANTITY	UNIT	UNIT PRICE	AMOUNT
6001	SECURITY CLASS: Unclassified SIXTH ORDERING YEAR (OPTION) (End of narrative A001)				
6001AA	PRODUCTION QUANTITY This is a Requirements Contract. See paragraph I-107, 52.216-21. NSN: 5420-01-470-5824 Improved Ribbon Bridge (IRB) Interior Bay Quantities Represent Estimates Only. Packaging and handling costs are included in the unit price. Shipping: Origin Inspection/Acceptance: Origin (End of narrative B001)	60	EA	$ 302,688	$ 18,161,280
	Packaging and Marking				
6002	SECURITY CLASS: Unclassified				
6002AA	PRODUCTION QUANTITY This is a Requirements Contract. See paragraph I-107, 52.216-21. NSN: 5420-01-470-5825 Improved Ribbon Bridge (IRB) Ramp Bay Quantities Represent Estimates Only. Packaging and handling costs are included in the unit price. Shipping: Origin Inspection/Acceptance: Origin	24	EA	$ 393,120	$ 9,434,880

Name of Offeror or Contractor: GENERAL DYNAMICS SANTA BARBARA SISTEMAS GMBH

ITEM NO	SUPPLIES/SERVICES	QUANTITY	UNIT	UNIT PRICE	AMOUNT
	(End of narrative B001)				
	Packaging and Marking				
6003	SECURITY CLASS: Unclassified				
6003AA	PRODUCTION QUANTITY This is a Requirements Contract. See parapgraph I-107, 52.216-21. NSN: 5420-12-361-9933 Improved Ribbon Bridge (IRB) Ramp Bay Roadway Section, Left Quantity Represents Estimate Only. Packaging and handling costs are included in the unit price. Shipping: Origin Inspection/Acceptance: Origin	1	EA	$ 109,115	$ 109,115
	(End of narrative B001)				
	Packaging and Marking				
6004	SECURITY CLASS: Unclassified				
6004AA	PRODUCTION QUANTITY This is a Requirements Contract. See paragraph I-107, 52.216-21. NSN: 5420-12-361-9934 Improved Ribbon Bridge (IRB) Ramp Bay Roadway Section, Right Quantity Represents an Estimate Only. Packaging and handling costs are included in the unit price. Shipping: Origin	1	EA	$ 109,115	$ 109,115

Name of Offeror or Contractor: GENERAL DYNAMICS SANTA BARBARA SISTEMAS GMBH

ITEM NO	SUPPLIES/SERVICES	QUANTITY	UNIT	UNIT PRICE	AMOUNT
	Inspection/Acceptance: Origin (End of narrative B001) Packaging and Marking				
6005	SECURITY CLASS: Unclassified				
6005AA	PRODUCTION QUANTITY This is a Requirements Contract. See paragraph I-107, 52.216-21. NSN: 5420-12-362-0727 Improved Ribbon Bridge (IRB) Ramp Left Outer Ponton Quantity Represents an Estimate Only. Packaging and handling costs are included in the unit price. Shipping: Origin Inspection/Acceptance: Origin (End of narrative B001)	1	EA	$ 62,498	$ 62,498
	Packaging and Marking				
6006	SECURITY CLASS: Unclassified				
6006AA	PRODUCTION QUANTITY This is a Requirements Contract. See paragraph I-107, 52.216-21. NSN: 5420-12-361-9935 Improved Ribbon Bridge (IRB) Ramp Right Outer Ponton Quantity Represents and Estimate Only.	1	EA	$ 62,498	$ 62,498

Name of Offeror or Contractor: GENERAL DYNAMICS SANTA BARBARA SISTEMAS GMBH

ITEM NO	SUPPLIES/SERVICES	QUANTITY	UNIT	UNIT PRICE	AMOUNT
	Packaging and handling costs are included in the unit price. Shipping: Origin Inspection/Acceptance: Origin (End of narrative B001) Packaging and Marking				
6007	SECURITY CLASS: Unclassified				
6007AA	PRODUCTION QUANTITY This is a Requirements Contract. See paragraph I-107, 52.216-21. NSN: 5420-12-361-9931 Improved Ribbon Bridge (IRB) Interior Bay Roadway Section, Left Quantity Represents an Estimate Only. Packaging and handling costs are included in the unit price. Shipping: Origin Inspection/Acceptance: Origin (End of narrative B001) Packaging and Marking	1	EA	$ 87,965	$ 87,965
6008	SECURITY CLASS: Unclassified				
6008AA	PRODUCTION QUANTITY This is a Requirements Contract. See paragraph I-107, 52.216-21. NSN: 5420-12-361-9931				

Name of Offeror or Contractor: GENERAL DYNAMICS SANTA BARBARA SISTEMAS GMBH

ITEM NO	SUPPLIES/SERVICES	QUANTITY	UNIT	UNIT PRICE	AMOUNT
	Improved Ribbon Bridge (IRB) Interior Bay Roadway Section, Right				
		1	EA	$ 87,965	$ 87,965
	Quantity Represents an Estimate Only. Packaging and handling costs are included in the unit price.				
	Shipping: Origin				
	Inspection/Acceptance: Origin				
	(End of narrative B001)				
	Packaging and Marking				
6009	SECURITY CLASS: Unclassified				
6009AA	PRODUCTION QUANTITY				
	This is a Requirements Contract. See paragraph I-107, 52.216-21.				
	NSN: 5420-12-361-9932				
	Improved Ribbon Bridge (IRB) Interior Bay Left Outer Ponton Section				
		1	EA	$ 62,264	$ 62,264
	Quantites Represented are Estimates Only. Packaging and handling costs are included in the unit price.				
	Shipping: Origin				
	Inspection/Acceptance: Origin				
	(End of narrative B001)				
	Packaging and Marking				
6010	SECURITY CLASS: Unclassified				
6010AA	PRODUCTION QUANTITY				
	This is a Requirements Contract. See paragraph I-107, 52.216-7.				

Name of Offeror or Contractor: GENERAL DYNAMICS SANTA BARBARA SISTEMAS GMBH

ITEM NO	SUPPLIES/SERVICES	QUANTITY	UNIT	UNIT PRICE	AMOUNT
	NSN: 5420-12-361-9932 Improved Ribbon Bridge (IRB) Interior Bay Right Outer Ponton Section Quantity Represents an Estimate Only. Packaging and handling costs are included in the unit price. Shipping: Origin Inspection/Acceptance: Origin (End of narrative B001) Packaging and Marking	1	EA	$ 62,264	$ 62,264
7001	SECURITY CLASS: Unclassified SEVENTH ORDERING YEAR (OPTION) (End of narrative A001)				
7001AA	PRODUCTION QUANTITY This is a Requirements Contract. See paragraph I-107, 52.216-21. NSN: 5420-01-470-5824 Improved Ribbon Bridge (IRB) Interior Bay Quantities Represent Estimates Only. Packaging and handling costs are included in the unit price. Shipping: Origin Inspection/Acceptance: Origin (End of narrative B001) Packaging and Marking	60	EA	$ 316,300	$ 18,978,000
7002	SECURITY CLASS: Unclassified				

Name of Offeror or Contractor: GENERAL DYNAMICS SANTA BARBARA SISTEMAS GMBH

ITEM NO	SUPPLIES/SERVICES	QUANTITY	UNIT	UNIT PRICE	AMOUNT
7002AA	PRODUCTION QUANTITY This is a Requirements Contract. See paragraph I-107, 52.216-21. NSN: 5420-01-470-5825 Improved Ribbon Bridge (IRB) Ramp Bay Quantites Represent Estimates Only. Packaging and handling costs are included in the unit price. Shipping: Origin Inspection/Acceptance: Origin (End of narrative B001)	24	EA	$ 410,724	$ 9,857,376
	Packaging and Marking				
7003	SECURITY CLASS: Unclassified				
7003AA	PRODUCTION QUANTITY This is a Requirements Contract. See paragraph I-107, 52.216-21. NSN: 5420-12-361-9933 Improved Ribbon Bridge (IRB) Ramp Bay Roadway Section, Left Quantity Represents an Estimate Only. Packaging and handling costs are included in the unit price. Shipping: Origin Inspection/Acceptance: Origin (End of narrative B001)	1	EA	$ 114,026	$ 114,026
	Packaging and Marking				

Name of Offeror or Contractor: GENERAL DYNAMICS SANTA BARBARA SISTEMAS GMBH

ITEM NO	SUPPLIES/SERVICES	QUANTITY	UNIT	UNIT PRICE	AMOUNT
7004	SECURITY CLASS: Unclassified				
7004AA	PRODUCTION QUANTITY This is a Requirements Contract. See paragraph I-107, 52.216-21. NSN: 5420-12-361-9934 Improved Ribbon Bridge (IRB) Ramp Bay Roadway Section, Right Quantity Represents an Estimate Only. Packaging and handling costs are included in the unit price. Shipping: Origin Inspection/Acceptance: Origin (End of narrative B001)	1	EA	$ 114,026	$ 114,026
	Packaging and Marking				
7005	SECURITY CLASS: Unclassified				
7005AA	PRODUCTION QUANTITY This is a Requirements Contract. See paragraph I-107, 52.216-21. NSN: 5420-12-362-0727 Improved Ribbon Bridge (IRB) Ramp Left Outer Ponton Quantity Represents an Estimate Only. Packaging and handling costs are included in the unit price. Shipping: Origin Inspection/Acceptance: Origin (End of narrative B001)	1	EA	$ 65,375	$ 65,375

Name of Offeror or Contractor: GENERAL DYNAMICS SANTA BARBARA SISTEMAS GMBH

ITEM NO	SUPPLIES/SERVICES	QUANTITY	UNIT	UNIT PRICE	AMOUNT
	Packaging and Marking				
7006	SECURITY CLASS: Unclassified				
7006AA	PRODUCTION QUANTITY This is a Requirements Contract. See paragraph I-107, 52.216-21. NSN: 5420-12-361-9935 Improved Ribbon Bridge (IRB) Ramp Right Outer Ponton Quantity Represents an Estimate Only. Packaging and handling costs are included in the unit price. Shipping: Origin Inspection/Acceptance: Origin (End of narrative B001)	1	EA	$ 65,375	$ 65,375
	Packaging and Marking				
7007	SECURITY CLASS: Unclassified				
7007AA	PRODUCTION QUANTITY This is a Requirements Contract. See paragraph I-107, 52.216-21. NSN: 5420-12-361-9931 Improved Ribbon Bridge (IRB) Interior Bay Roadway Section, Left Quantity Represents an Estimate Only. Packaging and handling costs are included in the unit price. Shipping: Origin	1	EA	$ 92,046	$ 92,046

Name of Offeror or Contractor: GENERAL DYNAMICS SANTA BARBARA SISTEMAS GMBH

ITEM NO	SUPPLIES/SERVICES	QUANTITY	UNIT	UNIT PRICE	AMOUNT
	Inspection/Acceptance: Origin (End of narrative B001) Packaging and Marking				
7008	SECURITY CLASS: Unclassified				
7008AA	PRODUCTION QUANTITY This is a Requirements Contract. See paragarph I-107, 52.216.21. NSN: 5420-12-361-9931 Improved Ribbon Bridge (IRB) Interior Bay Roadway Section, Right Quantity Represents an Estimate Only. Packaging and handling costs are included in the unit price. Shipping: Origin Inspection/Acceptance: Origin (End of narrative B001) Packaging and Marking	1	EA	$ 92,046	$ 92,046
7009	SECURITY CLASS: Unclassified				
7009AA	PRODUCTION QUANTITY This is a Requirements Contract. See paragraph I-107, 52.216-21. NSN: 5420-12-361-9932 Improved Ribbon Bridge (IRB) Interior Bay Left Outer Ponton Section Quantity Represents an Estimate Only. Packaging and handling costs are included in the unit	1	EA	$ 65,165	$ 65,165

Name of Offeror or Contractor: GENERAL DYNAMICS SANTA BARBARA SISTEMAS GMBH

ITEM NO	SUPPLIES/SERVICES	QUANTITY	UNIT	UNIT PRICE	AMOUNT
	price. Shipping: Origin Inspection/Acceptance: Origin (End of narrative B001) Packaging and Marking				
7010	SECURITY CLASS: Unclassified				
7010AA	PRODUCTION QUANTITY This is a Requirements Contract. See paragraph I-107, 52.216-21. NSN: 5420-12-361-9932 Improved Ribbon Bridge (IRB) Interior Bay Right Outer Ponton Section Quantity Represents an Estimate Only. Packaging and handling costs are included in the unit price. Shipping: Origin Inspection/Acceptance: Origin (End of narrative B001) Packaging and Marking	1	EA	$ 65,165	$ 65,165

SECTION C - DESCRIPTION/SPECIFICATIONS/WORK STATEMENT

C.1 GENERAL DESCRIPTION

C.1.1 The Improved Ribbon Bridge (IRB) shall be produced by the Contractor, as an independent contractor and not as an agent of the U.S. Government, in accordance with this Scope Of Work (SOW) and the ATPD-2277, IRB Detail Specification (Attachment 1). The Improved Ribbon Bridge (IRB) produced under this Scope of Work (SOW) shall be an integrated system of Interior and Ramp Bridge Bays which function seamlessly with associated IRB equipment (i.e. the Standard Ribbon Bridge (SRB) bays, Bridge Adapter Pallet (BAP), Common Bridge Transporter (CBT), Bridge Erection Boat (BEB), and the M1076 Palletized Load System Trailer (PLST).

C.2 SYSTEM RESPONSIBILITY

C.2.1 System Responsibility. The contractor shall have proprietary control over the design, documentation, production process and design changes for the IRB system, including the resolution of all interface issues related to the design, form, fit, function, integration and performance of the IRB specified herein. The contractor is encouraged to use commercial products, processes and practices.

C.2.2 The Integrated Product Team (IPTs) concept, utilized during contract W56HZV-05-D-0056, shall be applicable to this contract and throughout the duration of this contract performance. The contractor shall be ultimately responsible for all decisions affecting production of the IRB during contract performance. The Government shall not be liable for suggested solutions.

C.2.3 The contractor shall host a Start of Work Meeting no later than 30 working days after contract award (DACA), at the contractor's facility, (Kaiserslautern, Germany) or if desired by the U.S. Government, at a Government designated facility. The date of this meeting shall be mutually agreed upon between the contractor and the Government. The purpose and agenda for this meeting is to ensure that the Contractor has a firm and complete understanding of the requirements of this SOW. There shall be only one Start of Work meeting.

C.2.4 Initial IPT. The Government and contractor shall attend this initial IPT meeting at the contractors facility within 90 working DACA. The meeting shall include a discussion of the Scope of Work and Purchase Description and any issues pertaining to all functional areas. The meeting will also be a forum to finalize IPT assignments and membership.

C.2.5 Decisional correspondence shall be in Microsoft office format and submitted to the designated Contracting Officer.

C.3 PRODUCT ASSURANCE.

C.3.1 Quality System Requirement: Higher -Level Contract Quality Requirement, reference Section E clause 52.246-4025.

C.3.2 Product Quality Deficiency Reports (PQDR), Standard Form 368. A PQDR may be submitted whenever an issue with the produced item is identified by the customer. Upon receipt of PQDRs on fielded units, the Contractor shall take the following actions:

C.3.2.1 Verify the reported deficiency and begin an investigation.

C.3.2.2 Request any necessary exhibits.

C.3.2.3 Perform failure analysis and determine root cause.

C.3.2.4 Determine extent of problem, severity, and long term impact.

C.3.2.5 Failure Analysis and Corrective Action Report (FACAR) per DID DI-RELI-81315 (Contract Data Requirement List (CDRL) A001), shall be submitted within 30 calendar days of receipt of a PQDR. If a final response is not ready for submittal, the Contractor shall submit an interim response detailing the status of the investigation. The final response shall be submitted within 30 calendar days after an interim response, as appropriate, and shall include actions taken, root cause, corrective action needed, and Contractor's position with respect to repairs or replacement parts.

C.3.3 Final Inspection Record (FIR). The Contractor shall continue to update the latest approved FIR of W56HZV-05-D-0056 contract to reflect all engineering or manufacturing changes that impact the FIR during the entire contract period. Each update shall be in accordance with CDRL A002 and require Government notification and review. The Contractor shall submit the completed FIR to the Government with each unit offered for acceptance.

C.3.4 Quality Records. All records of inspections, examinations, certifications, tests, supplier audits, and purchase orders, shall be retained by the contractor for a period of 4 years after contract close out. These records shall be made available to the Government upon request.

C.3.5 Material Review Board (MRB). The Contractor shall establish a MRB, which is responsible for disposition of non-conforming material. In the event that the MRB determines non-conforming material can be repaired or used as is, the designated Government Representative shall be notified for review and approval.

C.3.6 Welding Procedures. The Contractor shall perform all welding required under this contract in accordance with the following paragraphs.

C.3.6.1 Qualification requirements for welders and weld inspectors.

C.3.6.1.1 Welder qualification. Before (i) assigning any welder or welding operator to perform manual, semi-automatic or automatic welding work, or (ii) using any automatic welding equipment for work covered by this contract, the contractor shall ensure that his welding equipment has been certified, and that his welders or welding operators have passed qualification testing, as prescribed by the applicable qualification standard identified in paragraph C.3.6.3 below.

C.3.6.1.2 Weld Inspection. During performance of this contract, the Contractor shall verify weld quality and workmanship using qualified inspectors trained to perform these inspection functions. Acceptable qualification for inspectors may be based on the following:

C.3.6.1.2.1 Current or previous certification as an American Welding Society (AWS) certified welding inspector; or

C.3.6.1.2.2 Inspection performed by an engineer or technician who is competent in the use of weld Inspection techniques and equipment, on the basis of (i) formal training or, (ii) experience, or both, in metals fabrication, inspection, and testing.

C.3.6.2 Welder Qualification. The Contractor shall certify that the welder/welding equipment have passed qualification tests as prescribed by the following AWS Standards:

C.3.6.2.1 AWS D1.1 for Structural Steel

C.3.6.2.2 AWS D1.2 for Structural Aluminum
C.3.6.2.3 AWS D1.3 for Sheet Metal
C.3.6.3 Workmanship Specimens. Prior to the start of production the Contractor shall validate welding procedures by preparing workmanship specimens. To reduce redundant fabrication of weld workmanship specimens may be grouped according to joint type, geometry, material thickness, position, type of process and strength, as approved by the designated COR. Fabrication of workmanship specimens shall be accomplished using the following:
C.3.6.3.1 The lower limits of the declared range of factors for those materials exceeding a thickness of 0.125 inches; and
C.3.6.3.2 The higher limits of the declared range for those materials equal to or less than a thickness of 0.125 inches.
C.3.6.3.3 If the Contractors workmanship specimens disclose the need for any changes or corrections to welding procedures all required updates and revisions shall be made.
C.3.6.4 If workmanship specimens have been previously qualified under another Government contract, the PCO may waive the requirements of this paragraph. The written request for waiver shall be submitted, for approval, to the PCO, and the previous contract(s) shall be identified.
C.3.7 Treatment and Painting. The portions of the interior bay and ramp bay assembly normally painted shall be cleaned and treated in accordance with TT-C-490 if ferrous, or MIL-C-5541 if aluminum, primed and painted with chemical agent resistance paint in accordance with MIL-C-53072. Unless otherwise specified, the topcoat color shall be Color Chip No. 34094 Green 383 of FED-STD-595. When camouflage patterns are required, the top coat shall be over-coated in accordance with the Government furnished camouflage patterns and top coat colors conforming to MIL-C-53072.

C.4 Configuration Management
C.4.1 The configuration of the IRB shall conform to the First Article Test (FAT) approved under Contract W56HZV-05-D-0056.
C.4.2 The Contractor shall update and maintain the Configuration Management Plan for the IRB contained in Attachment 004. The Contractor can use MIL-HDBK-61A(SE) to update the Configuration Management Plan. All Class I ECPs, and major and critical Requests for Deviation (RFDs), shall be approved by the Procuring Contracting Officer (PCO) prior to implementation by the Contractor. The ECPs and RFDs shall be prepared per the contractors configuration management plan and the following requirements under C.4.3.
C.4.3 Configuration Management, Baseline and Control
C.4.3.1 Product Configuration Identification (PCI). All drawings and associated documents used to produce the approved First Article and all approved Engineering Change Proposals (ECPs) under contract DAAE07-00-C-S014 shall constitute the approved PCI and be the baseline for future changes.

C.4.3.2 Engineering Changes.
C.4.3.2.1 All proposed changes to the IRB shall be reported to the Government. These include, but are not limited to design changes, component changes, changes in source of components, and changes that affect the contractor's drawing package for the IRB. The procedures for reporting changes shall be identified in the Configuration Management Plan. The following procedures for Government notice and approval shall apply and be incorporated into the contractor's Configuration Management Plan.
C.4.3.2.2 Following are the definitions for Class I and II ECPs. Class I - A change that effects the following: performance, part interchangeability, cost, maintainability, reliability, integrated logistic support, or delivery schedule. Class II - A change that impacts none of the Class I factors as specified above.
C.4.3.3 Class II Engineering Changes. Contractor Requested.
C.4.3.3.1 These changes shall be performed and submitted in accordance with CDRL A003 and as specified in the current Government Configuration Management Plan (GCMP) dated December 2002 for the IRB System. A copy of the GCMP is contained in Attachment 004.
C.4.3.4 Class I Engineering Changes. Contractor Requested.
C.4.3.4.1 These changes shall be performed and submitted in accordance with CDRL A003 and as specified in the current Government Configuration Management Plan (GCMP) for the IRB.
C.4.3.4.2 The contractor shall use the same process used in the previous contract and described in the IRB GCMP to prepare and submit Class I ECPs. The Government may require additional testing for the proposed change at no additional cost to the Government.
C.4.3.4.3 Approved changes shall be incorporated by contract modification. In the event the change results in reduced cost to the Contractor, the change shall be the subject of an equitable reduction in the contract price. Any cost impact must be fully supported by the contractor, and the Government shall have the right to conduct post-change cost reviews.
C.4.3.4.4 Configuration changes under this contract shall not relieve the Contractor of the responsibility to conform to the delivery requirements of this contract.
C.4.3.5 Class I Engineering Changes. Government Directed.
C.4.3.5.1 In the event the Government desires a change to the IRB configuration, the PCO shall notify the Contractor through a request for technical and price proposal from the Contractor. It is understood that the engineering costs associated with ECP preparation are allowable and allocable to the ECP.
C.4.3.5.2 Copies of ECPs shall be submitted in the same manner as Contractor requested Class I Engineering Changes.
C.4.3.6 Value Engineering Change Proposals (VECPs). The Contractor shall prepare VECPs in the same manner as Class I ECPs.
C.4.3.7 The Contractor shall continue to assign the ECP number the same way used in the previous contract. The Contractor shall maintain records of where and when each ECP number was used.
C.4.3.8 Request for Deviation (RFD)
C.4.3.8.1 Definitions:
DEVIATION: Is a temporary departure from requirements and does not constitute a change to the approved configuration. The authorized deviation is for a specific number of units or a specified period of time. Where it is determined that a change should be permanent, a Class I or Class II engineering change must be processed.
C.4.3.8.2 When deviations to ATPD-2277, or any other contract requirements are considered necessary by the contractor, an RFD shall be

prepared and submitted in accordance with CDRL A004 and CDRL A005 respectively. The Government reserves the right to seek adequate consideration for approved RFDs. All major and critical Requests for Deviation shall be annotated by the Contractor to reflect actual production effectivity point by IRB serial/registration number and dates, and then submitted to the PCO for approval. All RFDs shall be submitted to the PCO for approval.
C.4.3.8.3 Contractual changes can only be made by the PCO.

C.5 Transportability
The contractor shall update the Transportability Report of the previous contract and deliver it IAW CDRL A006 delivered if transportability characteristics of the IRB change.

C.6 Training
C.6.1 Training Requirements. The Contractor shall provide technically qualified instructors, training and instructional material related to training courses for Government identified personnel on Operation and Maintenance for the IRB.
C.6.2 Training Plan Outline and Training Material Deliverables
C.6.2.1 Training Plan Outline. The Contractor shall update the approved training plan used in the previous contract and provide it to Government for review and approval. Once the updated training plan is approved, it will be used for the entire contract period.
C.6.2.2 Instructor Guides. The Contractor shall prepare and deliver an Instructor Guide (IG) for both the Operator (OP) course and the maintenance (OP/Field) course (Reference DID DI-SESS-81523B and CDRL A007).
C.6.2.3 Student Guides. The Contractor shall prepare and deliver a Student Guide (SG) for both the Operator (OP) course and the maintenance (OP/Field) course (Reference DID DI-SESS-81523B and CDRL A007). Any ancillary training material used, i.e.: charts, diagrams, schematics, worksheets, etc. shall be included as part of the SG. In addition, the contractor shall provide a hard copy of Operator Manual (TM 5-5420-278-10) per student for Operator training and a hard copy of Maintenance Manual and RPSTL (TM 5-5420-278-24&P) per student for Maintenance training to the unit 30 days prior to each NET. (Reference A010)
C.6.3 Training Classes. The Contractor shall conduct training in accordance with the training plan. Class size for Operator training shall not exceed twenty (20) students. Test training shall be conducted as close as possible to start of respective tests.
C.6.3.1 Training Support Package (TSP). The Contractor shall prepare and deliver a TSP for the course (Reference DID DI-SESS-81523B and CDRL A007). The TSP will include as a minimum, program of instruction, lesson plans, multimedia presentation, diagnostics, and other training support products necessary to permit the unit to develop and conduct effective and efficient training upon completion of New Equipment Training.
C.6.4 NET Training Options. The individual class costs for both Operator and Maintenance NET are found in Section B of the Contract. It is the intent of the Government to call up both the Operator and Maintenance NET at the same time.
C.6.5 Contractor Technical Assistance. Contractor technical assistance to support IRB fieldings and training shall be provided by the use of Field Service Representative (s) who shall advise and make recommendations to orient and instruct Government identified personnel with respect to operation, inspection, maintenance, repair, engineering support, de-processing support and contractor parts support. Such representatives shall be thoroughly experienced and qualified to perform the technical assistance required. It shall require an FSR for 45 days per each fielding for deprocessing and NET. It also may require an additional FSR for 90 days per year. The Attachment 003 shows the scheduled fielding of the IRB thru FY11.

C.7 LOGISTICS SUPPORT
C.7.1 Integrated Logistics Support (ILS) Program. The contractor shall have an ILS Program as an integral part of the IRB effort.
C.7.1.1 ILS Objectives. ILS program objectives are:
C.7.1.1.1 To identify and implement design improvements to improve safety of the system operators and maintainers, improve ease of maintenance, and increase reliability.
C.7.1.1.2 To analyze the system design and create the most cost efficient logistics support package and maintenance plan.
C.7.1.1.3 To accurately identify and document all the logistics support resources required to operate and maintain the system.
C.7.1.1.4 To update the Logistics Support Package, to incorporate engineering changes, to include updated vendor information, and correct errors.
C.7.1.1.5 To create and deliver Logistics Support Products to support test and fielding.
C.7.1.2 IRB Operation and Support (O&S) Cost Reduction Strategy. The Contractor shall establish an O&S cost baseline for the 20 year expected life of the IRB if there is any major hardware change introduced to the system. This cost baseline shall consider initial hardware cost and projected costs for initial fielding, initial training, follow-on training, repair parts, maintenance labor costs for scheduled and unscheduled maintenance. The contractor shall present the cost baseline and their anticipated methodology for identifying O&S Cost reduction targets at a IRB IPT for IPT review and approval.
C.7.1.2.1 At the following IRB IPT the contractor shall present his O&S Cost reduction strategy using the methodology presented in the previous IPT. Following that presentation and at subsequent IPTs the contractor shall provide an analysis of proposed changes to the hardware and/or the maintenance plan that will improve (reduce) the IRBs life cycle cost. The presentation of these changes shall include both a rough order of magnitude estimate of the cost of implementing these changes and the expected savings.
C.7.1.2.2 Proposed changes to improve the IRB O&S Cost may be generated by any and all members of the IRB IPT. The contractor shall make an independent evaluation of his own design and maintenance plan and propose changes. Targets of opportunity the contractor may consider are the scheduled maintenance program (PMCS), Reliability of essential parts and components, Maintainability characteristics of the design, repair versus discard decisions on components and sourcing and Stockage policies on repair/spare parts and other costs related to the contractors parts support program.
C.7.2 Maintenance Planning. The Government plan for maintaining the IRB requires establishing the capability to perform all Field and Sustainment Maintenance within the Organic Army units. The contractor will perform maintenance beyond these two levels of support. See paragraph C.9. The contractor shall be responsible for developing a recommended allocation of IRB maintenance tasks within the Army

maintenance structure, subject to Government approval.

C.7.3 Logistic Management Information-Provisioning. The contractor shall continue to maintain and update the existing Provisioning Master Record (PMR)database developed under contract DAAE07-00-C-S014 and updated under contract W56HZV-05-D-0056. (A copy of the PMR is in the possession of both the Government and the Contractor.) For guidance see Engineering Data for Provisioning DI-ILSS-81289. Incomplete PLISN records shall be deemed not-acceptable.
C.7.4 Provisioning Objective: To provide the Government with current, accurate and acceptable data IAW Exhibit C, Logistics Management Information (LMI) Data Product Delivery. The contractor may use a commercial LSAR system based on MIL-STD 1388-2A in place of an LMI system based on MIL-STD 1388-2B. Provisioning effort shall include, but not be limited to, all approved ECPs, VECPs, parts changes, supporting Engineering Data for Provisioning (EDFP), and the Anchorage System. The PMR PCCN CP0008, PCC EIB and ERB shall reflect the most current production configuration and component information. LMI Provisioning data may be submitted using PPL-LSA-036 Report format for all items during provisioning reviews.
C.7.5 Provisioning Data Quality Assurance: Government Acceptance of provisioning data delivered under the provisions of this contract will be based upon the guidance contained in the Quality Assurance Provisioning Guidance Book (QAPG)and this SOW.
C.7.6 Provisioning Reviews shall be scheduled based on the number of data available for review. A typical conference will comprise no more than 500 data, or Provisioning List Item Sequence Numbers (PLISNs), however, review conferences may be called by either the contractor or Government as the situation demands.
C.7.7 The contractor shall have available the following at each provisioning conference for review:
C.7.7.1 Two paper copies of the LSA-036 Summary. Provisioning Parts List (PPL) format is acceptable.
C.7.7.2 Copy of acceptable EDFP for each component, sub-assembly or assembly listed on the LMI Data Product Report that does not have an NSN. Electronic media may be substituted in lieu of paper copies.
C.7.7.3 A copy of the Pre-Procurement screening results. Electronic media may be substituted in lieu of paper copies.
C.7.7.4 A copy of each installation or assembly drawing within which the part appears. Electronic media may be substituted in lieu of paper copies.
C.7.7.5 A composite CD-ROM, comprising the PPL, Screening and EDFP (all in PLISN sequence) shall be submitted at the conclusion of the Provisioning Review.
C.7.8 Logistics Management Information - Data Products/Provisioning Parts List (PPL). (DI-ALSS-81529 CDRL A008). The PPL submittal shall be compliant with the requirements of MIL-STD 1388-2B, in the form of a LSA 036 report suitable for delivery and use without necessity for modification to either data elements, data files or the data system.
C.7.9 The contractor shall provide Engineering drawing support for each individual part or tool sufficient to support the Government's cataloging effort, as defined below.
C.7.9.1 All text shall be in the English language.
C.7.9.2 Characteristic or dimensional data, if not in English, shall have appropriate English conversion.
C.7.9.3 Each drawing shall have the associated PLISN annotated on the drawing.
C.7.9.4 Drawings shall be submitted in PLISN sequence.
C.7.9.5 Sub-assembly or assembly drawings shall not be deemed adequate for individual component provisioning, unless the manufacturer or supplier, claiming proprietary privilege, refuses to produce an individual component drawing. In the event this privilege is invoked, a letter of refusal, under company letterhead, shall accompany the drawing submittal.
C.7.9.6 All proprietary data shall be appropriately annotated and may be marked "For Provisioning Purpose Only". Likewise any Source Control, Altered Item, Specification Control or Engineering approval required drawing, shall be appropriately annotated.
C.7.9.7 EDFP shall be evaluated during provisioning reviews. Unacceptable EDFP shall be corrected within 30 working days after notice of rejection.
C.7.10 Logistic Management Information - Summaries/Pre-Procurement Screening (DI-ALSS-81530, CDRL A009) the contractor shall conduct pre-procurement screening for all items to be provisioned.
C.7.10.1 If an item is known to be a non-U.S component, the NATO Master Cross Reference List (MCRL) shall also be used for screening purposes.
C.7.10.2 Screening shall be accomplished using known or accepted programs, the Federal Logistics Information Service (FLIS) is preferred and has a public search capability.
C.7.10.3 Engineering drawings are not required for items screened and found to have a valid National Stock Number (NSN). In the event that a NATO Stock Number is available, screening results shall be provided.
C.7.10.4 Substitutes for drawings, such as commercial catalogs or catalog descriptions, sketches or photographs with descriptions or dimensions, material, mechanical, electrical or other descriptive characteristics will be evaluated on a case by case basis. Please see Exhibit C which shows the Minimum Provisioning Data Requirements Data Record H and H1.
C.7.10.5 Order of precedence for establishing the validity of an NSN is based upon compatibility between the Reference Number Category Code (RNCC) and Reference Number Variation Code (RNVC) as depicted below:
C.7.10.5.1 Any 2/2 reference
C.7.10.5.2 Any 3/2 reference
C.7.10.5.3 In the absence of an (a) or (b) reference, a 5/2 reference may be used.
C.7.10.5.4 Particular attention shall be applied to the Acquisition Advice Code (AAC) of the NSN. Any NSN depicted with an AAC of V or Y shall not be acceptable.
C.7.11 The contractor shall ensure that all submitted LMI Data Products are compatible with the TACOM Commodity Command Standard System (CCSS). The data shall be capable of being loaded into the PMR without any modification to the data, data file or system. Electronic submission of data is preferred. Portable Document File (.pdf) format is preferred.
C.7.12 The contractor shall correct rejects within 30 working days after Government notification of rejected data.

C.8 Technical Manuals. The purpose of this Technical Manual effort is to maintain and update the existing manuals developed under contract DAAE07-00-C-S014: to incorporate all design/logistic changes that have occurred under contract W56HZV05D0056 and occurring throughout the duration of this contract.
C.8.1 The Contractor shall maintain and update, to include the Anchorage System information. The following Technical Manuals to support the IRB:
C.8.1.1 TM 5-5420-278-10 Operators Manual
C.8.1.2 TM 5-5420-278-24&P Unit, Direct Support, and General Support Maintenance Manual
C.8.1.3 IRB Smart Book
C.8.2 A maintenance task or operators procedure shall contain:
C.8.2.1 References to any other manuals or publications required to perform the task or procedure
C.8.2.2 A reference to the appropriate illustration in the parts manual;
C.8.2.3 Equipment preconditions
C.8.2.4 Illustrations as needed to support the task or procedure being performed
C.8.3 Changes to the contractor's Parts Manual shall illustrate and provide a tabular listing of all assemblies, subassemblies, components and individual repair parts of the IRB. The tabular listing or the parts manual shall include Figure number, item number, Nomenclature, SMR Code, part number, CAGE Code, NSN, quantity per application and in the case of common hardware, size information.
C.8.4 TM Change Scope of Work to the Technical Manual
C.8.4.1 The contractor shall continue to plan and manage an IRB ILS program, developing and delivering a change package to the existing IRB logistics products (Technical Manuals, Parts Provisioning Data and Training Package).
C.8.4.1.1 Changes to update logistics products to the current IRB Production Configuration baseline (Configuration Lock at the end of previous contract(s), DAAE07-00-C-S014 and W56HZV-05-D-0056). This shall include the addition of the Anchorage System information.
C.8.4.1.2 Changes to update the logistics products to the FMECA/Task List review.
C.8.4.1.3 Changes to update logistics products to the approved Contractor Repair (LL) items list.
C.8.4.1.4 Changes due to Block upgrades by ECPs or safety modifications.
C.8.4.2 The contractor shall generate a revised task list based on C.8.4.1.1, C.8.4.1.2 and C.8.4.1.3. The contractor shall present the revised task list to the Government for review and approval NLT 28 days after award of this scope of work. The task list approved at this review will be the basis for all logistic product updates to follow.
C.8.4.3 Upon approval of the revised task list, the contractor shall perform a review of the current Bill of Material (BOM) (Configuration Lock) and the current Parts Master Record (PMR) and determine all the efforts required to synchronize the BOM, MAC and PMR. The contractor shall present his list of proposed changes to the Government at a Logistics IPR NLT 28 days after approval of the revised task list. The agreed upon results of this meeting shall define the logistics change package. The contractor shall update the IRB MAC according to the results of the FMECA developed task list.
C.8.4.4 Based on the above effort the contractor shall update IRB provisioning to document the configuration change. The contractor shall incorporate extended provisioning nomenclature to improve parts identification on the L card.
C.8.4.4.1 The contractor shall present these changes at a provisioning conference (complete with all documentation required by the existing contract.) This conference shall be held 60 days after the Logistics IPR (C.8.4.3).
C.8.4.4.2 The contractor shall update the provisioning documentation based on the comments provided at the provisioning conference and deliver a corrected LSA 036, and required provisioning drawings and other data 30 days after completion of the conference.
C.8.4.4.3 At the conclusion of the change effort (completion of technical manuals), the contractor shall update the PMR to incorporate figure and item number information for all items contained in the changed IRB Repair Parts Special Tools Manual (RPSTL).
C.8.4.5 The contractor shall update the existing IRB manuals to the configuration change. In preparing these Technical manual changes the contractor may employ MIL STD 40051A and MIL Handbook 1222 as guidance. At the conclusion of the TM update effort the contractor shall hyperlink IRB technical manual elements.
C.8.4.5.1 The contractor shall generate a change to the IRB Operators Manual (-10) to:
C.8.4.5.1.1 Document the configuration change and deliver a list of proposed changes to the -10 manual for approval
C.8.4.5.1.2 Update appendices to cover Components of the End Item (COEI), Basic Issue Items (BII), Government furnished Additional Authorized Items List (AAL) and Expendable/ Durable items List
C.8.4.5.1.3 Update the MAC
C.8.4.5.1.4 Nomenclature in -10 should match -24&P.
C.8.4.5.2 Contractor will deliver a list of proposed TM changes no later than 2 weeks at the completion of the provisioning conference.
C.8.4.5.3 The Contractor shall deliver two (2) paper copies and a .pdf file of each of the changed IRB manuals (-10, -24 & P).
C.8.4.6 The contractor shall generate a change to the existing IRB training package to document the configuration change. The contractor shall deliver a draft Program of Instructions (POI) 14 days prior to the start of TM validation/verification and the final changed training materials for review 14 days after the completion of the TM validation/verification. The contractor shall incorporate comments made to the changes and deliver final materials 14 days after the review.
C.8.4.7 During the course of this effort, the contractor shall employ a tracking system to record potential future changes to the logistics products (changes beyond the March 2003 configuration). These changes may include design changes, test recommendations, improvements as a result of field inquiries, and identification of shortfalls or errors in the current product. This tracking system will be used to define and schedule the next IRB Logistics change package. This configuration catalog shall be in MS Excel format that details all changes made under contracts DAAE07-00-C-S014 and W56HZV-05-D-0056.
C.8.4.8 A delivery schedule for the IRB Logistics changes shall be established at the start of work meeting.
C.8.5 TM Validation/Verification.
C.8.5.1 The contractor shall be responsible to validate all the changes contained in each of the IRB Technical Manuals. The contractors validation process will ensure that all data provided is accurate, complete and facilitates the most efficient performance possible on each maintenance task. The Government will verify the manuals concurrently by observing and participating in the validation

process. The Government will identify TM information that shall receive hands on validation/verification prior to the beginning of the Verification.
C.8.6 Technical Manual Delivery: The contractor shall deliver a reproducible camera-ready copy and two sets (each on their own CD-ROMs) of electronic .pdf files of all changes to the manuals as specified in CDRL A010. The .pdf delivery shall be identical to the camera ready hard copy. The camera-ready deliveries will be used for official government printing and copies will be provided to the contractor.

C.9 Contractor Life Cycle Parts Support.
C.9.1 Contractor Parts Identification: The contractor shall identify all potential repair and replacement parts of the IRB using Microsoft Office compatible spreadsheet format. The contractor shall include the following data elements in this spreadsheet; Part Nomenclature, Part Number, Contractor and Government Entity (CAGE) Code, known sources of supply, Source, Maintenance and Recoverability (SMR) Code based on:
C.9.1.1 Source Code (1st and 2nd character) - the contractor's estimation as to how the component is to be obtained or made available by the supply system.
C.9.1.2 Maintenance Code (3rd and 4th character - contractor's recommendation which U.S. Army organic maintenance entity has the capability to use, remove, install and perform minor maintenance on the component and which entity has the capability to affect complete repair of the component.
C.9.1.3 Recoverability Code (5th character) - contractor's recommendation as to which U.S. Army organic maintenance entity should dispose of the component.
C.9.1.4 Current or best estimated price of the component. In developing the price the contractor shall consider optimizing competition. The price shall include the base price of the part, packaging, marking and shipping the part. The contractor shall establish a parts inventory sufficient to allow filling and shipping 85% of the parts requested with in 3 days of receipt of the request. The contractor shall continue to update the list on a semiannual basis throughout the life of this contract.
C.9.2. The Contractor and the Government will negotiate a separate contract agreement for parts support of the IRB utilizing contractor direct delivery to the user. The goal of the Government is to employ Contractor parts support throughout the service life of the IRB, a minimum of 20 years.

C.10 Standard Warranty for IRB Bays
C.10.1 Materiel and Workmanship Warranty. Whether or not the Government has inspected and accepted supplies furnished under this contract, the contractor shall warrant that the supplies and services are free from defects in material and workmanship, and conform to the specifications and other requirements of this contract.
C.10.1.2 The basic IRB System warranty shall be effective for 13 months from the date of hand-off. The date of hand-off shall be defined by the date of hand-off to the gaining U.S. Army unit (DA Form 3161 shall document the date of hand off). The contractor shall provide greater pass through warranty coverage on components, to the extent that the contractor's suppliers customarily provide such greater coverage to their customers. Contractor shall provide this listings to the Government for inclusion into the Contract. The contractor may be required to store bays at the location of manufacture for up to two years at no charge to the Government in order for bridge bays to be fielded in unit sets of 30 interior bays and 12 ramp bays.
C.10.1.3 If new IRB bays (interior or ramp) are placed in storage at either contractor or Government facilities, before being put in service, the warranty period shall not start until each such IRB bay is withdrawn from that storage, or until nine months from the date shown on the Materiel Inspection and Receiving Report (DD Form 250); whichever occurs first.
C.10.1.4 If placed in contractor storage, the contractor shall maintain and exercise such stored IRB bays in accordance with the contractor's approved technical manual. Upon removal from storage, and before delivering the IRB bays to the Government, the contractor shall exercise and perform all PMCS tasks in accordance with the contractor's approved technical manual.
C.10.1.5 If placed in Government storage, the Government will exercise stored IRB bays in accordance with the contractor's approved technical manual. The Government shall notify the contractor before placing each such IRB bay in storage, and again at the time it is withdrawn. If there are any contractor-caused retrofits that must be applied to the IRB bays, the storage time does not start until those retrofits are completed.
C.10.1.6 For IRB bays designated as Manufacturing Standards, the warranty period shall start when the IRB bays are shipped to their final destination. However, Manufacturing Standard IRB bays shall be treated as IRB bays placed in contractor storage for purposes of maintenance in storage.
C.10.1.7 If a safety recall defect occurs during or after the warranty period, the contractor shall extend the warranty period until the necessary corrections are made.

C.11 System Safety.
C.11.1 Safety Engineering. The contractor shall consider and implement safety engineering principles in the system design. System design and operational procedures developed by the contractor shall consider but not be limited to the following:
C.11.1.1 Identifying hazards associated with the system by conducting safety analyses and hazard evaluations. Analysis shall include both operational and maintenance aspects of the vehicle along with potential interface problems with planned subsystems.
C.11.1.2 Eliminating or reducing significant hazards by appropriate design or material selection.
C.11.1.3 Controlling or minimizing hazards to personnel, this cannot be avoided or eliminated.
C.11.1.4 Locating equipment components and controls so that access to them by personnel during operation, maintenance or adjustments shall not require exposure to hazards such as high temperature, chemical burns, electrical shock, cutting edges, sharp points, or concentrations of toxic fumes above established threshold limit values. All moving parts, mechanical power transmission devices, exhaust system components, pneumatic components and hydraulic components which are of such a nature or so located as to be a hazard to operating or maintenance personnel; shall be either enclosed or guarded. Protective devices shall not impair operational functions.

C.11.1.5 Assuring that suitable warning and caution notes are included in instructions for operation, maintenance, assembly and repairs and distinct markings placed on hazardous components of equipment.
C.11.1.6 Insuring that safety is considered for both operational and maintenance phases of the system.
C.11.2 System Safety Program. To assure the safety objectives are achieved, the contractor shall maintain the System Safety Program that was developed in the prototype phase of the program.
C.11.3 Hazard Identification
C.11.3.1 The contractor shall provide information concerning newly identified hazards that have resulted either from hardware redesign or a reevaluation of the configuration that had undergone Government testing. These new hazards will be considered for inclusion into the Government Hazard Tracking System. As a minimum, the following information should be provided for each hazard:
C.11.3.1.1 Description of each hazard, to include cause, possible effect, hazard category
C.11.3.1.2 Status of each hazard
C.11.3.1.3 Proposed corrective action
C.11.3.2 The hazard information will be addressed at Integrated Product Team Meetings and included in the Safety Assessment and Health Hazard Assessment Reports as appropriate.
C.11.4 Safety Assessment Report (SAR).
C.11.4.1 The contractor shall update the Safety Assessment Report of the previous contract if there are any hardware changes due to ECPs/VECPs which impact the safety of the IRB system.
C.11.5 Radioactive Material. Radioactive material will not be utilized in the equipment supplied to the Government under this contract.
C.11.6 Health Hazard Assessment (HHA). The contractor shall update the Health Hazard Assessment Report for the IRB if there are any changes due to ECPs/VECPs which impact the health hazard of the IRB system.

C.12 Manpower and Personnel Integration (MANPRINT)
The contractor shall continue to maintain and execute a MANPRINT program to ensure the integration of the seven (7) MANPRINT domains, i.e. manpower, personnel, training, human factors engineering, system safety, health hazards, and soldier survivability in the design and design modification process. The MANPRINT program shall be planned and managed in such a manner that it will facilitate the greatest MANPRINT design influence to achieve total system (soldier and machine) performance. MANPRINT related design changes, accomplishments, and crew performance validations shall be addressed at appropriate IPT meetings.
C.12.1 Manpower and Personnel. The contractor shall perform manpower and personnel analyses as a part of the design modification effort to determine implication of design change on the crew and maintainer workload. A required characteristic is to maintain crew and maintainer Military Occupational Specialty (MOS) skills and capabilities at or below those required by the target audience.
C.12.2 Training. The contractor shall evaluate impact of design modification on training requirement for the crew and maintainer. Any additional training requirement shall be addressed at appropriate IPT meetings and shall be included in the training plan.
C.12.3 Human Factors Engineering (HFE). Any modification made to the IRB system shall be made in accordance with ATPD 2277 assuring that the soldier-machine interface (SMI) is not compromised for effective operation and maintenance by full range of user personnel (5th percentile female through 95th percentile male) while they are wearing the full range of protective clothing (including arctic and Mission Oriented Protective Posture (MOPP IV). The contractor shall identify critical human performance issues associated with the SMI and addressed them during appropriate IPTs.
C.12.4 Soldier Survivability (SSV). The contractor shall evaluate any design change made to the IRB design for impact on the Soldier Survivability. Any issues or concerns related to the SSV shall be discussed during appropriate IPTs.

C.13 Scope of Work for Class I ECP.
C.13.1 The contractor shall perform a Failure Modes, Effects and Criticality Analysis (FMECA) on all Class 1 ECPs pertaining to hardware. The results of the FMECA must support development of IRB maintenance task frequencies, maintenance man-hour projections and maintenance parts consumption projections.
C.13.2 The contractor shall calculate the projected IRB reliability/availability based on the numbers developed in the FMECA.
C.13.3 The Contractor shall present the results of the FMECA and the resulting task list evaluation to the Government at an IPT, location TBD, prior to making block upgrades to the production configuration.

C.14 Contractor deployed Field Service Representative.
C.14.1 Contractor deployed Field Service Representative(s) would be deployed to Korea and Kuwait.
C.14.1.1 The contractor shall provide one (1) Field Service Representatives to each unit receiving IRB at Continental United States (CONUS) and Outside Continental United States (OCONUS) locations as required. The Contracting Officer or his representative will provide exact locations to the contractor under separate letter. The contractor is responsible for providing all clothing, equipment (tools, and special tools), lodging and transportation required for performance of repair, training and special needs of the units to support the Improved Ribbon Bridge for a period of up to one year from date of incorporation in to the contract. The contractor may be required to provide Field Service Representative(s) in support of operations described below. The contractor can refer to AMC-P 715-18 entitled AMC Contracts and Contractors Supporting Military Operations for further explanation. The Government at the discretion of the Contracting Officer or his representative may decide to provide some items of support as detailed below at the direction of the Theatre Commander or his representative.
C.14.1.2 The IRB is employed in a support role and expected to be behind combat units. The contractor will be required to perform maintenance tasks either directly at a bridge site (again, to the rear of combat units in direct combat operations) or even farther to the rear in maintenance collection points and semi-fixed/fixed sites. The contractor will be required to be well behind the forward line of troops or combat units (near the rear of the Division) and would not be in direct contact with ground/air assaults and those combat units engaging in the actual fight. The contractor may perform their support services as far forward as needed, on a temporary

basis, consistent with the terms of the contract and the tactical situation. If contractor personnel are requested to move forward closer to the front-line combat units, they will have the right to refuse or decline to move forward.
C.14.1.3 In the event that the contractor deploys individuals into the area of operations in support of a contingency or exercise, the following items and conditions will apply.
C.14.1.3.1 Management
C.14.1.3.1.1 The contractor shall ensure that all contractor employees will comply with all guidance, instructions, and general orders applicable to U.S. Armed Forces and DOD civilians and issued by the Theater Commander or his representative. This will include any and all guidance and instructions issued based upon the need to ensure mission accomplishment, force protection and safety.
C.14.1.3.1.2 The contractor shall comply, and shall ensure that all deployed employees and agents comply, with pertinent Department of Army and Department of Defense directives, policies, and procedures, as well as federal statues, judicial interpretations and international agreements (e.g., Status of Forces Agreements, Host Nation Support Agreements, etc.) applicable to U.S. Armed Forces or U.S. citizens in the area of operations. Disputes will be resolved by the Contracting Officer.
C.14.1.3.1.3 The contractor shall take reasonable steps to ensure the good conduct of its employees. The contractor shall promptly resolve, to the satisfaction of the Contracting Officer, all contractor employee performance and conduct problems identified by the cognizant Contracting Officer or his designated representative.
C.14.1.3.1.4 The Contracting Officer may direct the contractor, at the contractors expense, to remove or replace any contractor employee failing to adhere to instructions and general orders issued by the Theater Commander or his designated representative.
C.14.1.3.2 Accounting for Personnel
C.14.1.3.2.1 As directed by the Contracting Officer or his representative, the contractor shall report its employees entering and leaving the area of operations.
C.14.1.3.2.2 As directed by the Contracting Officer or his representative, the contractor shall report its employees in the area of operations by name and by location.
C.14.2 Logistics Support Element
C.14.2.1 The contractor shall place all employees deploying to support this contract under administrative control of the designated Logistics Support Element.
C.14.2.2 The Contracting Officer or his representative (in coordination with the Logistics Support Element Commander) shall provide the contractor with all required reporting instructions and procedures.
C.14.3 Risk Assessment and Mitigation
C.14.3.1 The contractor will brief its employees regarding the potential danger, stress, physical hardships and field living conditions.
C.14.3.2 The contractor will require all its employees to acknowledge in writing that they understand the danger, stress, physical hardships and field living conditions that are possible if the employee deploys in support of military operations.
C.14.3.3 The contractor will conduct physical and medical evaluations of all its deployable employees at their own expense to ensure that they are capable of enduring the rigors of deployment in support of a military operation.
C.14.3.4 The contractor will replace employees within 72 hours, or as directed by the Contracting Officer, at contractor expense, if the employee departs an area of operations without written permission from the Contracting Officer.
C.14.3.5 The contractor will designate a point of contact for all of its plans and operations.
C.14.3.6 The contractor will establish an operations center to plan and control contractor deployment process and resolve operational issues with the deployed force.
C.14.3.7 The contractor will prepare plans for support of military operations as required by contract or as directed by the Contracting Officer.
C.14.3.8 For badging and access purposes, the contractor will provide the Army with a list of suitable or qualified subcontractors including local vendors in an area of operations.
C.14.3.9 As required by the operational situation, the Government will relocate contractor personnel (who are citizens of the United States, aliens resident in the United States or third country nationals, not resident in the host nation) to a safe area or evacuate them from the area of operations.
C.14.4 Funding
The contractor will provide a cost estimate within 24 hours of a tasking by the Contracting Officer, or other time period as determined by the Contracting Officer.
C.14.5 Force Protection
The Army will provide force protection to contractor employees commensurate with that given to Department of the Army civilians.
C.14.6 Legal Assistance
While contractor employees are processing for deployment at the CONUS Replacement Center (CRC) or deployed in the theater of operations, the Government shall provide legal assistance in accordance with the following conditions:
C.14.6.1 The legal assistance is in accordance with applicable international or host nation agreements.
C.14.6.2 The legal assistance is limited and ministerial in nature (for example, witnessing signatures on documents and providing notary services), legal counseling (to include review and discussion of legal correspondence and documents), and legal document preparation (limited to powers of attorney and advanced medical directives), and help retaining non-DoD civilian attorneys.
C.14.7 Central Processing and Departure Point
C.14.7.1 For any contractor employee determined by the Government at the deployment processing site to be non-deployable for any reason, the contractor shall promptly remedy the problem. If the problem cannot be remedied in time for deployment, a replacement having equivalent qualifications and skills shall be provided in time for a scheduled deployment.
C.14.7.2 The Contracting Officer shall identify to the contractor all required mission training and the location of the required training.
C.14.7.3 The contractor shall ensure that all deploying employees receive all required mission training and successfully complete the

training.
C.14.7.4 The Contracting Officer shall inform the contractor of all Nuclear, Biological, and Chemical (NBC) equipment and Chemical Defensive Equipment (CDE) training requirements and standards.
C.14.7.5 The Government shall provide the contractor employees with CDE familiarization training commensurate with the training provided to Department of Defense civilian employees.
C.14.7.6 The contractor will provide chemical defense equipment and training for dependents, who accompany its employees to Korea and other areas of operations as designated by the Contracting Officer.
C.14.8 Standard Identification Cards
C.14.8.1 The Contracting Officer shall identify to the contractor all identification cards and tags required for deployment.
C.14.8.2 The Contracting Officer shall inform the contractor where the identification cards and tags are to be issued.
C.14.8.3 The Contracting Officer shall coordinate for issuance of required identification cards and tags for all contractor employees not processing through a CONUS Replacement Center.
C.14.8.4 The contractor shall ensure that all deploying individuals have the required identification tags and cards prior to deployment.
C.14.8.5 Upon redeployment, the contractor will ensure that all issued controlled identification cards and tags are returned to the Government.
C.14.9 Medical
C.14.9.1 The Contracting Officer shall provide the contractor with all physical and medical requirements and standards necessary for deployment.
C.14.9.2 The contractor shall be responsible for providing employees who meet the physical standards and medical requirements for job performance in the designated theater of operations.
C.14.9.3 The Government may require medical screening at the CONUS Replacement Center to include DNA sampling and immunizations.
C.14.9.4 For any contractor employee determined by the Government to be non-deployable, the contractor shall promptly remedy the problem. If the problem can not be remedied, a replacement having equivalent qualifications and skills shall be provided as determined by the Contracting Officer.
C.14.9.5 When applicable, the Government shall provide to contractor employees deployed in the theater of operations, on a cost reimbursable basis, emergency medical and dental care commensurate with the care provided to Department of Defense civilian deployed in the theater of operations.
C.14.10 Clothing and Equipment Issue
C.14.10.1 The contractor shall ensure that contractor employees possess the necessary personal clothing and safety equipment to execute contract performance in the theater of operations in accordance with the statement of work.
C.14.10.2 The Government shall provide to the contractor all required military unique organizational clothing and individual equipment. (Types of organizational clothing and individual equipment may include Nuclear, Biological, and Chemical defensive equipment.)
C.14.10.3 The Contracting Officer shall identify to the contractor the organizational clothing and individual equipment issue point and issue items.
C.14.10.4 Upon receipt of organizational clothing and individual equipment, the contractor shall assume responsibility and accountability for these items.
C.14.10.5 The contractor or contractor employee shall sign for all issued organizational clothing and individual equipment, thus, acknowledging receipt and acceptance of responsibility for the proper maintenance and accountability of issued organizational clothing and individual equipment.
C.14.10.6 The contractor shall ensure that all issued organizational clothing and individual equipment is returned to the Government. Upon return of organizational clothing and individual equipment to the Government, the contractor shall be responsible for requesting, maintaining, and providing to the Contracting Officer documentation demonstrating the return of issued organizational clothing and individual equipment to Government control.
C.14.10.7 The Contracting Officer will require the contractor to reimburse the Government for organizational clothing and individual equipment lost or damaged due to contractor negligence.
C.14.11 Weapons and Training
C.14.11.1 The Government may choose to issue weapons for self-defense to the contractor employees. Acceptance of weapons by contractor employees is at the discretion of the contractor and the contractor employees. When accepted, the contractor employee is responsible for using the weapon in accordance with the rules of engagement issued by the Theater Commander. The contractor employee is legally liable for any use that is not in accordance with the rules of engagement. Also when accepted, only military issued ammunition may be used in the weapon.
C.14.11.2 Prior to issuing any weapons to contractor employees, the Government shall provide the contractor employees with weapons familiarization training commensurate to training provided to Department of Defense civilian employees.
C.14.11.3 The contractor shall ensure that its employees adhere to all guidance and orders issued by the theater Commander or his representative regarding possession, use, safety and accountability of weapons and ammunition.
C.14.11.4 Upon redeployment or notification by the Government, the contractor shall ensure that all Government issued weapons and ammunition are returned to Government control.
C.14.11.5 Contractors will screen employees to ensure that employees can be issued a weapon in accordance with U.S. law (e.g., no felony conviction for any reason and no misdemeanor Conviction for spousal abuse) or applicable host nation laws.
C.14.12 Vehicle and Equipment Operation
C.14.12.1 The contractor shall ensure that deployed employees possess the required civilian licenses to operate the equipment necessary to perform the contract in the theater of operations in accordance with the statement of work.
C.14.12.2 Before operating any military owned or leased equipment, the contractor employee shall provide proof of license (issued by an appropriate Governmental authority) to the Contracting Officer or his representative.

C.14.12.3 The Government, at its discretion, may train and license contractor employees to operate military owned or leased equipment.
C.14.12.4 The contractor and its employees may be held jointly and severally liable for all damages resulting from the unsafe or negligent operation of military owned or leased equipment.
C.14.13 Passports, Visas and Customs
C.14.13.1 At the contractor employees and/or contractors expense, the contractor employees shall obtain all passports, visas, or other documents necessary to enter and/or exit any area(s) identified by the Contracting Officer.
C.14.13.2 All contractor employees shall be subject to the customs processing procedures, laws, agreements and duties of the country in which they are deploying to and the procedures, laws, and duties of the United States upon re-entry.
C.14.13.3 The Contracting Officer will determine and stipulate the allowability and allocability of payment for entry/exit duties on personal items in possession of contractor employees.
C.14.14 Reception, Staging, Onward Movement and Integration
C.14.15 Living under Field Conditions
Upon arrival in the area of operations, contractor employees will receive Reception, Staging, Onward movement and Integration, as directed by the Contracting Officer or his designated representative. The Government shall provide to contractor employees deployed in the theater of operations the equivalent field living conditions, subsistence, emergency medical and dental care, sanitary facilities, mail delivery, laundry service, and other available support afforded to Government employees and military personnel in the theater of operations, unless otherwise specified in the contract.
C.14.16 Morale, Welfare, Recreation
The Government shall provide to contractor employees deployed in the theater of operations, morale, welfare, and recreation services commensurate with that provided to Department of Defense civilians and military personnel deployed in the theater of operations.
C.14.17 Status of Forces Agreement
C.14.17.1 After having consulted with the servicing legal office, the Contracting Officer shall advise the contractor on all applicable Status of Forces Agreements (SOFA) and other similar related agreements.
C.14.17.2 The contractor shall adhere to all relevant provisions of the applicable Status of Forces Agreements (SOFA) and other similar related agreements.
C.14.17.3 In the event the contractor must pay additional compensation above that contemplated under the contract, to retain or obtain personnel to perform in a theater of operations during a declared contingency, the contractor shall be entitled to an equitable adjustment under this contract. The contractor shall furnish proper data to the Contracting Officer to substantiate any adjustment to the contract. Failure to agree to an amount of any such adjustment shall be a dispute within the meaning of the clause entitled Disputes as contained in this contract.
C.14.17.4 To ensure continuation of essential services, the contractor shall structure pay of deployed employees such that half the compensation is in the form of a bonus for successfully completing the assigned tour. However, the bonus will not be denied because death or because of Government or opposing force actions, including Government ordered evacuation or captivity by opposing forces.
C.14.18 Tour of Duty/Hours of Work
C.14.18.1 The Contracting Officer shall provide the contractor with the anticipated duration of the deployment.
C.14.18.2 The contractor may rotate contractor employees into and out of the theater provided there is not degradation in mission results.
C.14.18.3 The Contracting Officer shall approve in advance all changes to personnel.
C.14.18.4 The Contracting Officer shall provide the contractor with the anticipated daily or weekly work schedule.
C.14.18.5 The contractor shall comply with all duty hours and tours of duty identified by the Contracting Officer or his designated representative.
C.14.18.6 The Contracting Officer, or his designated representative, may modify the work schedule to ensure the Governments ability to continue to execute its mission.
C.14.19 On-Call Duty
C.14.19.1 The contractor shall be reasonably available to work (i.e., on-call) during other than regular hours to perform high priority tasks.
C.14.19.2 The Contracting Officer, or his designated representative, will identify the parameters of reasonable availability and all remuneration for on call duty.
C.14.20 Health and Life Insurance
The contractor shall ensure that health and life insurance benefits provided to its deploying employees are in effect in the theater of operations.
C.14.21 Next of Kin Notification
Before deployment, the contractor shall ensure that each contractor employee completes a DD Form 93, Record of Emergency Data Card, and returns the completed form to the Contracting Officer's representative or designated Government official.
C.14.22 Return Procedures
C.14.22.1 Upon notification of redeployment, the Contracting Officer shall authorize contractor employee travel from the theater of operations to the designated CONUS Replacement Center (CRC) or individual deployment site.
C.14.22.2 The contractor shall ensure that all Government-issued clothing and equipment provided to the contractor or the contractors employees are returned to Government control upon completion of the deployment.
C.14.22.3 The contractor shall provide the Contracting Officer with documentation, annotated by the receiving Government official, of all clothing and equipment returns.
C.14.23 Reporting Requirements. The contractor shall provide on a monthly basis in contractor format the costs incurred by the contractor for Field Service Support. This report shall detail, labor costs (including overtime), travel, supplies, and other costs. The contractor shall notify the Contracting Officer when expenditures for this effort reach seventy (70) percent of the amount funded via electronic mail. In no event is the contractor authorized to spend more money than is obligated in Section B. The Contracting

Officer at his discretion may increase the amount of money available based on the notice provided by the contractor. This report shall be provided to the Contracting Officer electronically.

C.15 Parts Support During OCONUS Activities.
C.15.1 Parts Support During OCONUS Activities, reference CLIN 1013.
C.15.1.1 The contractor shall provide spare and repair parts as needed to support units deployed OCONUS for a period of up to one year from date of contract modification. This parts support is to support those items not available to units or the contractors Field Service Representative in the units ASL, the Governments SSP, or in the Government Supply System. The contractor agrees to provide all required parts within the following timelines:
C.15.1.1.1 Parts designated as Priority 1 within 24 hours, where ever possible, of order by either the unit or the contractors Field Service Representative, or
C.15.1.1.2 Parts designated as Priority 2 within 48 hours, where ever possible, of order by either the unit or the contractors Field Service Representative, or
C.15.1.1.3 Parts designated as Priority 3 within 72 hours, where ever possible, of order by either the unit or the contractors Field Service Representative. The contractor shall expedite delivery of required items using commercial air freight service or military transportation as directed by the Contracting Officer or his representative.
C.15.1.2 The contractor shall provide a priced catalog or other documentation as agreed to by the Contracting Officer and shall be an attachment to the contract. The contractor and Government agree to a maximum amount to be available for this support as specified in Section B. The contract shall notify the Contracting Officer when expenditures for this effort reach seventy (70) percent of the amount funded via electronic mail. The Email address is victor.vaughn@us.army.mil and to keith.powell@us.army.mil. In no event is the contractor authorized to spend more money than is obligated in Section B. The Contracting Officer at his discretion may increase the amount of money available based on the notice provided by the contractor.
C.15.1.3 The contractor shall provide a report in contractor format on the amount spend by month detailing the items ordered and the delivery times and cost. This report shall be provided electronically to the Contracting Officer.

C.16 Instructions in Regards to Contractor Travel Costs. The contractor shall submit its total estimated travel and per diem costs for each proposed trip to the PCO and the ACO. The PCO, by modification, will establish and fund a CLIN(s) for approved trips. The contractor within 30 days after completion of each trip will submit a DD250 invoice, using the appropriate CLIN, to the ACO for approval and subsequent payment by DFAS Columbus Center. The contractor shall attach a summary sheet broken down by person and appropriate category of expense for each CLIN with the DD250 invoice. All hard copies of receipts for incurred expenses will be maintained and kept by the contractor. The U.S. Government reserves the right to review these receipts at any time.

C.17 Item Unique Identification (IUID). The Contractor shall develop and assign IUID codes for components and assemblies in accordance with MIL-STD-130L. IUID labeling shall be applied to items in accordance with MIL-STD-130L. The Contractor shall use the following information in deciding which components and assemblies of the IRB shall be marked with an IUID tag: (1) Serially-managed modules and repairable parts with a unit cost of $5,000 or more embedded within the end item; (2) Serially-managed modules and repairable parts with a unit cost of $5,000 or more that are procured separately from the end item.

C.17.1 The scope of the IRB IUID shall only encompass the IRB system end items. The IRB system consists of an M16 IRB Ramp Bay (RB) and M17 IRB Interior Bay end items.

C.17.2 At a minimum, IUID codes shall be assigned and applied to all provisioned items with a value of at least $5,000 and to the following items.

Item Name	IUID Tags	NSN	P/N	Description
Ramp Bay	1	5420-01-470-5825	NA	Ramp Bay (RB)
*Ponton, Outer R.H.	1	NA	027500205	Right Half Outer Ponton
*Ponton, Outer L.H.	1	NA	027500207	Left Half Outer Ponton
*Ponton, Inner R.H.	1	NA	027500201	Right Half Inner Ponton
*Ponton, Inner L.H.	1	NA	027500203	Left Half Inner Ponton
Interior Bay	1	5420-01-470-5824	NA	Interior Bay (IB)
*Ponton, Outer	2	NA	027000205	Ponton, Outer
*Ponton, Inner	2	NA	027000203	Ponton, Inner
*Lever Manual Control	1	5340-12-356-7856	027501205	Lever, Manual Control

The Contractor shall use the following information in the development of the IUID label for the above items.
Reference is made to Attachment 002 of this contract. This Attachment contains graphic representation of the IUID plates.

C.17.3 For any hardware change as a result of an ECP, the Contractor shall recommend and the Government concur on the determine of tag locations. As changes are made to the IRB, the Contractor shall use the above information in deciding if changes need to be made or revised to insure IUID tag marking.

C.17.4 The Cage Code, Part Number and Serial Number shall appear in both human readable and Bar Code formats. The 2D Data Matrix shall have the information in accordance with MIL-STD-130L with Change 1 which includes the following (but not limited to) as applicable.
C.17.4.1 Item Description
C.17.4.2 Unique identification consisting of Concatenated DoD unique item identification or DoD reorganized unique identification equivalent
C.17.4.3 Unique item identifier type
C.17.4.4 Issuing agency code (if DoD unique item identifier is used)
C.17.4.5 Enterpriser identifier (if DoD unique item identifier is used)
C.17.4.6 Lot or batch number
C.17.4.7 Original part number
C.17.4.8 Current part number
C.17.4.9 Current part number effective date
C.17.4.10 Serial number
C.17.4.11 Unit of measure
C.17.4.12 Governments unit acquisition cost
C.17.4.13 Ship-to code
C.17.4.14 Contractor CAGE number or DUNS number
C.17.4.15 Contract number
C.17.4.16 Contract line, sub-line, or exhibit line item number,
C.17.4.17 Acceptance code,
C.17.4.18 Shipment Date

C.18 The Contract requires an IRB Anchorage system that secures a 150 meter ribbon bridge enclosure using shore guys. Based on this requirement, the Contractor shall use the present IRB Anchorage system requirements as contained within this contract as a baseline. The Contractor shall develop an Anchor Kit to enable the IRB to be secured at a length of 210 meters using shore guys. The Government also desires that this length be extended to 300 meters.

C.18.1 The Contractor shall improve the present 150 meter anchor system to enable it to sustain an IRB with a length of 210 meters using shore guys. This shall be developed to be issued in the form of an Anchor Kit. The following shall be used in developing the kits.

C.18.2 As a minimum the Anchorage Kit shall take into consideration the following.
C.18.2.1 The anchoring system must be bulk transportable, preferably on flatracks.
C.18.2.2 The anchoring system must have a low signature and minimal environmental impacts.
C.18.2.3 The anchoring system must hold the bridge systems for extended periods, up to one month, taking stress off Bridge Erection Boats and other equipment.
C.18.2.4 If a power source is required, then it must come from organic equipment of a Multi-Role Bridge Company.
C.18.2.5 The system must not be manpower intense (no more than present anchoring system), require little extra training over the 150 meter training already in use, and have recoverable components.
C.18.2.6 The anchoring system must hold the IRB in water currents up to ten (10) feet per second.
C.18.2.7 The anchoring system shall include engineering drawings appropriate for provisioning and a complete inventory/component listing.

C.18.3 The IRB Anchorage Kit shall be provided complete with an storage capability. Kits are to be easily integrated with existing MRBC CBT LHS utility.

C.18.4 Contractor shall design the IRB 210 meter Anchorage system to comply with MRBC fuel and equipment requirements, ensuring smooth integration into existing MRBC authorized equipment.

C.18.5 Contractor shall also design an IRB Anchorage "add-on" capability designed to extend the max capability of the system to 300 meters. This shall be also tested with the 210 meter Anchor system.

C.18.6 The Contractor shall produce one (1) 210 meter Anchor Kit to include an equipment necessary to expand the 150 meter Anchorage system to 210 meter capability for testing by the Government. The Contractor shall develop and provide a draft updated IRB Anchorage User manual to include PMCS and field level maintenance for use during testing. The Contractor shall also provide two support personnel for two weeks to support this operational assessment test. The personnel shall be well versed in the operation and maintenance of the Anchor Kit. The Government shall also test the proposed answer to the capability to support a 300 meter IRB. This testing shall be conducted at the 739th in Granite City, IL.

C.18.7 At the successful completion of the testing, the Contractor shall provide the Government a cost proposal for the following requirements. The Government and the Contractor shall then negotiate the costs for the following and incorporate those requirements into the contract by a Contract modification. This shall include a breakout of costs of individual parts.

C.18.7.1 The Contractor shall develop and provide an updated IRB Anchorage User manual to include, PMCS and field level maintenance.
C.18.7.2 The Contractor shall provide the GOV an IRB Anchorage System training plan to include student guides, instructor guides, and

student exams in the System Approach to Training (SAT) format. The IRB Anchorage System new equipment training module shall be no longer than 8hrs.
C.18.7.3 The Contractor shall provide 2 (two) IRB Anchorage System New Equipment Trainers per IRB fielding beginning with the 1438th MRBC in Rolla, MO. This fielding is scheduled for 2nd quarter of FY08. The following is the present Anchor fielding schedule for the IRB. All future IRB Anchorage fielding and trainings shall occur simultaneously with all subsequent IRB fieldings.
C.18.7.3.1 957th in Bismark, ND in 3rd quarter of FY08.
C.18.7.3.2 1041st in Rock Springs, WY in 4th quarter of FY08.
C.18.7.3.3 189th in Tazwell, VA, in 2nd quarter of FY09.
C.18.7.3.4 401st in Norman, OK, in 3rd quarter of FY09.
C.18.7.3.5 2225th in Marrero, LA in 4th quarter of FY09.
C.18.7.3.6 362nd in Ft Benning, GA in 1st quarter of FY10.
C.18.7.3.7 436th in Redding, CA, in 3rd quarter of FY10.
C.18.7.3.8 551st in El Campo, CA, in 1st quarter of FY11.
C.18.7.3.9 23rd in Ft. Worth, TX, in 3rd quarter of FY11.

C.18.7.4 The Contractor shall provide all the required supplemental provisioning technical data (SPTD) for the full provisioning of the IRB Anchorage System, to include the Anchor Kit.

C.18.7.5 The contractor shall prepare an Engineering Change Proposal (ECP) to formally include the IRB 210 meter Anchorage system into the IRB system.

C.18.7.6 Presently the Government requires an IRB Field Service Representative to support IRB fieldings for 14 days per location. An Anchorage NET Trainer FSR shall be required for no more then 5 days per IRB fielding location.

C.18.7.7 The Contractor shall provide the Government a single IRB Anchorage Trainer/FSR to support and address anchorage fieldings to all previously IRB fielded MRBCs 12 (twelve) and the single IRB Training Base at Ft. Leonard Wood, MO. The projected duration of support per location will be no longer than 3 days.

The Government shall identify those units who need this additional training to the contractor by letter. Upon receipt of the letter the contractor shall provide a cost proposal to train those units. These costs shall be added to this contract by modification.

C.18.7.8 The units, locations and projected desired fielding timelines are listed below.

C.18.7.8.1 TANG Base at Ft Leonard Wood, MO, in FY08
C.18.7.8.2 74th at Ft Hood, TX, in FY08.
C.18.7.8.3 814th at Ft. Polk, LA, in FY08.
C.18.7.8.4 502nd at Ft. Knox, KY, in FY08.
C.18.7.8.5 50th at Ft. Leonard Wood, MO, in FY09.
C.18.7.8.6 341st at Barling, AR, in FY09.
C.18.7.8.7 299th at Ft Belvoir, VA, in FY09.
C.18.7.8.8 459th at Clarkesburg, WV, in FY10.
C.18.7.8.9 200th at Chamberlain, SD, in FY10.
C.18.7.8.10 652nd at Ellsworth, WI, in FY10.
C.18.7.8.11 1437th at Sault Saint Marie, MI, in FY11.
C.18.7.8.12 671st at Portland, OR, in FY11.
C.18.7.8.13 739th at Granite City, IL, in FY11.
C.18.7.8.14 250th at Danielson, CT, in FY12.
C.18.7.8.15 TRNG Base at Ft Leonard Wood, MO, in FY12.

*** END OF NARRATIVE C0001 ***

SECTION D - PACKAGING AND MARKING

	Regulatory Cite	Title	Date
D-1	252.211-7003	ITEM IDENTIFICATION AND VALUATION	JUN/2005

[Note: The following clause requires unique item identification marking, or a DoD recognized unique identification equivalent, for items listed in paragraphs (c)(1)(ii) of the clause. Unique item identification marking is also required for all items delivered under the contract for which the government's acquisition cost (as defined under 'Definitions' below) is $5,000 or more. Unique item identification marking is required for embedded subassemblies, components, and parts if listed in paragraph (c)(1(iii). In the event that the government has not yet identified these items or embedded parts, paragraph (c)(1)(ii) will read "TBD" for "to be determined". If these items are identified by the government before the time proposals are due, an amendment to the solicitation will be issued which identifies them. If not, award will be made on the basis of them not being identified, however the contract may be later modified to include such identification marking. This clause also requires the contractor to report the government's acquisition cost for each item delivered under the contract. Information concerning these requirements is available at http://www.acq.osd.mil/uid]

(a) Definitions. As used in this clause--

"Automatic identification device" means a device, such as a reader or interrogator, used to retrieve data encoded on machine-readable media.

Concatenated unique item identifier means

(1) For items that are serialized within the enterprise identifier, the linking together of the unique identifier data elements in order of the issuing agency code, enterprise identifier, and unique serial number within the enterprise identifier; or

(2) For items that are serialized within the original part, lot, or batch number, the linking together of the unique identifier data elements in order of the issuing agency code; enterprise identifier; original part, lot, or batch number; and serial number within the original part, lot, or batch number.

Data qualifier means a specified character (or string of characters) that immediately precedes a data field that defines the general category or intended use of the data that follows.

DoD recognized unique identification equivalent means a unique identification method that is in commercial use and has been recognized by DoD. All DoD recognized unique identification equivalents are listed at http://www.acq.osd.mil/dpap/UID/equivalents.html .

DoD unique item identification means a system of marking items delivered to DoD with unique item identifiers that have machine-readable data elements to distinguish an item from all other like and unlike items. For items that are serialized within the enterprise identifier, the unique item identifier shall include the data elements of the enterprise identifier and a unique serial number. For items that are serialized within the part, lot, or batch number within the enterprise identifier, the unique item identifier shall include the data elements of the enterprise identifier; the original part, lot, or batch number; and the serial number.

Enterprise means the entity (e.g., a manufacturer or vendor) responsible for assigning unique item identifiers to items.

Enterprise identifier means a code that is uniquely assigned to an enterprise by an issuing agency.

Governments unit acquisition cost means

(1) For fixed-price type line, subline, or exhibit line items, the unit price identified in the contract at the time of delivery;

(2) For cost-type or undefinitized line, subline, or exhibit line items, the Contractors estimated fully burdened unit cost to the Government at the time of delivery; and

(3) For items produced under a time-and-materials contract, the Contractors estimated fully burdened unit cost to the Government at the time of delivery.

Issuing agency means an organization responsible for assigning a non-repeatable identifier to an enterprise (i.e., Dun & Bradstreets Data Universal Numbering System (DUNS) Number, Uniform Code Council (UCC) /EAN International (EAN) Company Prefix, or Defense Logistics Information System (DLIS) Commercial and Government Entity (CAGE) Code.

Issuing agency code means a code that designates the registration (or controlling) authority for the enterprise identifier.

Item means a single hardware article or a single unit formed by a grouping of subassemblies, components, or constituent parts.

Lot or batch number means an identifying number assigned by the enterprise to a designated group of items, usually referred to as either a lot or a batch, all of which were manufactured under identical conditions.

Machine-readable means an automatic identification technology media, such as bar codes, contact memory buttons, radio frequency identification, or optical memory cards.

Original part number means a combination of numbers or letters assigned by the enterprise at item creation to a class of items with the same form, fit, function, and interface.

Parent item means the item assembly, intermediate component, or subassembly that has an embedded item with a unique item identifier or DoD recognized unique identification equivalent.

Serial number within the enterprise identifier means a combination of numbers, letters, or symbols assigned by the enterprise to an item that provides for the differentiation of that item from any other like and unlike item and is never used again within the enterprise.

Serial number within the part, lot, or batch number means a combination of numbers or letters assigned by the enterprise to an item that provides for the differentiation of that item from any other like item within a part, lot, or batch number assignment.

Serialization within the enterprise identifier means each item produced is assigned a serial number that is unique among all the tangible items produced by the enterprise and is never used again. The enterprise is responsible for ensuring unique serialization within the enterprise identifier.

Serialization within the part, lot, or batch number means each item of a particular part, lot, or batch number is assigned a unique serial number within that part, lot, or batch number assignment. The enterprise is responsible for ensuring unique serialization within the part, lot, or batch number within the enterprise identifier.

Unique item identifier means a set of data elements marked on items that is globally unique and unambiguous.

Unique item identifier type means a designator to indicate which method of uniquely identifying a part has been used. The current list of accepted unique item identifier types is maintained at http://www.acq.osd.mil/dpap/UID/uid_types.html .

(b) The Contractor shall deliver all items under a contract line, subline, or exhibit line item.

(c) DoD unique item identification or DoD recognized unique identification equivalents.

(1) The Contractor shall provide DoD unique item identification, or a DoD recognized unique identification equivalent, for

(i) All delivered items for which the Governments unit acquisition cost is $5,000 or more; and

(ii) The following items for which the Governments unit acquisition cost is less than $5,000:

Contract Line, Subline, or Exhibit Line Item Number: Ref. C.17

Item Description: Ref. C.17

(iii) Subassemblies, components, and parts embedded within delivered items, specified as Ref.C.17.

(2) The concatenated unique item identifier and the component data elements of the DoD unique item identification or DoD recognized unique identification equivalent shall not change over the life of the item.

(3) Data syntax and semantics of DoD unique item identification and DoD recognized unique identification equivalents. The Contractor shall ensure that

(i) The encoded data elements (except issuing agency code) of the unique item identifier are marked on the item using one of the following three types of data qualifiers, as determined by the Contractor:

(A) Data Identifiers (DIs) (Format 06) in accordance with ISO/IEC International Standard 15418, Information Technology EAN/UCC Application Identifiers and ANSI MH 10 Data Identifiers and ANSI MH 10 Data Identifiers and Maintenance.

(B) Application Identifiers (AIs) (Format 05), in accordance with ISO/IEC International Standard 15418, Information Technology EAN/UCC Application Identifiers and ANSI MH 10 Data Identifiers and ANSI MH 10 Data Identifiers and Maintenance.

(C) Text Element Identifiers (TEIs), in accordance with the DoD collaborative solution DD format for use until the

solution is approved by ISO/IEC JTC1 SC 31. The DD format is described in Appendix D of the DoD Guide to Uniquely Identifying Items, available at http://www.acq.osd.mil/dpap/UID/guides.htm ; and

(ii) The encoded data elements of the unique item identifier conform to ISO/IEC International Standard 15434, Information Technology Syntax for High Capacity Automatic Data Capture Media.

(4) DoD unique item identification and DoD recognized unique identification equivalents.

(i) The Contractor shall

(A) Determine whether to serialize within the enterprise identifier or serialize within the part, lot, or batch number; and

(B) Place the data elements of the unique item identifier (enterprise identifier; serial number; and for serialization within the part, lot, or batch number only; original part, lot, or batch number) on items requiring marking by paragraph (c)(1) of this clause, based on the criteria provided in the version of MIL-STD-130, Identification Marking of U.S. Military Property, cited in the contract Schedule.

(ii) The issuing agency code

(A) Shall not be placed on the item; and

(B) Shall be derived from the data qualifier for the enterprise identifier.

(d) For each item that requires unique item identification under paragraph (c)(1)(i) or (ii) of this clause, in addition to the information provided as part of the Material Inspection and Receiving Report specified elsewhere in this contract, the Contractor shall report at the time of delivery, either as part of, or associated with, the Material Inspection and Receiving Report, the following information:

(1) Concatenated unique item identifier; or DoD recognized unique identification equivalent.

(2) Unique item identifier type.

(3) Issuing agency code (if concatenated unique item identifier is used).

(4) Enterprise identifier (if concatenated unique item identifier is used).

(5) Original part number.

(6) Lot or batch number.

(7) Current part number (if not the same as the original part number).

(8) Current part number effective date.

(9) Serial number.

(10) Governments unit acquisition cost.

(e) For embedded DoD serially managed subassemblies, components, and parts that require unique item identification under paragraph (c)(1)(iii) of this clause, the Contractor shall report at the time of delivery, either as part of, or associated with the Material Inspection and Receiving Report specified elsewhere in this contract, the following information:

(1) Concatenated unique item identifier or DoD recognized unique identification equivalent of the parent item delivered under a contract line, subline, or exhibit line item that contains the embedded subassembly, component, or part.

(2) Concatenated unique item identifier or DoD recognized unique identification equivalent of the embedded subassembly, component, or part.

(3) Unique item identifier type.**

(4) Issuing agency code (if concatenated unique item identifier is used).**

(5) Enterprise identifier (if concatenated unique item identifier is used).**

(6) Original part number.**

(7) Lot or batch number.**

(8) Current part number (if not the same as the original part number.**

(9) Current part number effective date.**

(10) Serial number.**

(11) Unit of measure.

(12) Description.

** Once per item.

(f) The Contractor shall submit the information required by paragraphs (d) and (e) of this clause in accordance with the data submission procedures at http://www.acq.osd.mil/dpap/UID/DataSubmission.htm.

(g) Subcontracts. If paragraph (c)(1) of this clause applies, the Contractor shall include this clause, including this paragraph (g), in all subcontracts issued under this contract.

[End of Clause]

D-2 52.211-4517 PACKAGING REQUIREMENTS (COMMERCIAL) NOV/2005
(TACOM)

(a) The preservation, packing, and marking requirements for this contract/order shall be accomplished in accordance with the performance requirements defined herein. The following Packaging requirements shall apply:

LEVEL OF PRESERVATION: Commercial

LEVEL OF PACKING: Commercial

QUANTITY PER UNIT PACKAGE: 1

(1) Packaging: Preservation, packaging, packing, unitization and marking furnished by the supplier shall provide protection for a minimum of one year and meet or exceed the following requirements. It also provides for multiple handling, redistribution and shipment by any mode.

(2) Cleanliness: Items shall be free of dirt and other contaminants which would contribute to the deterioration of the item or which would require cleaning by the customer prior to use. Coatings and preservatives applied to the item for protection are not considered contaminants.

(3) Preservation: Items susceptible to corrosion or deterioration shall be provided protection by means of preservative coatings, volatile corrosion inhibitors, desiccants, waterproof and/or watervaporproof barriers.

(4) Cushioning: Items requiring protection from physical and mechanical damage (e.g. fragile, sensitive, material critical) or which could cause physical damage to other items, shall be protected by wrapping, cushioning, pack compartmentalization, or other means to mitigate shock and vibration to prevent damage during handing and shipment.

(b) Unit Package: A unit package shall be so designed and constructed that it will contain the contents with no damage to the item(s), and with minimal damage to the unit pack during shipment and storage in the shipping container, and will allow subsequent handling. The outermost component of a unit package shall be a container such as a sealed bag, carton or box. Unit packs shall be designed to conserve weight and cube while retaining the protection required and enhancing standardization.

(c) Unit Package Quantity: Unless otherwise specified, the unit package quantity shall be one each part, set, assembly, kit, etc.

(d) Intermediate Package: Intermediate packaging is required whenever one or more of the following conditions exists:

(1) The quantity is over one (1) gross of the same national stock number,
(2) Use enhances handling and inventorying,
(3) The exterior surfaces of the unit pack is a bag of any type, regardless of size,
(4) The unit pack is less than 64 cubic inches,

(5) The weight of the unit pack is under five (5) pounds and no dimension is over twelve (12) inches.

Intermediate containers shall be limited to a maximum of 100 unit packs, a net load of 40 pounds, or a maximum volume of 1.5 cubic feet, whichever occurs first.

(e) Packing:

(1) Unit packages and intermediate packages not meeting the requirements for a shipping container shall be packed in shipping containers. All shipping containers shall be the most cost effective and shall be of minimum cube to contain and protect the items.

(2) Shipping Containers: The shipping container (including any necessary blocking, bracing, cushioning, or waterproofing) shall comply with the regulations of the carrier used and shall provide safe delivery to the destination at the lowest tariff cost. The shipping container shall be capable of multiple handling, stacking at least ten feet high, and storage under favorable conditions (such as enclosed facilities) for a minimum of one year.

(f) Unitization: Shipments of identical items going to the same destination shall be palletized if they have a total cubic displacement of 50 cubic feet or more unless skids or other forklift handling features are included on the containers. Pallet loads must be stable, and to the greatest extent possible, provide a level top for ease of stacking. A palletized load shall be of a size to allow for placement of two loads high and wide in a conveyance. The weight capacity of the pallet must be adequate for the load. The preferred commercial expendable pallet is a 40 x 48 inch, 4-way entry pallet although variations may be permitted as dictated by the characteristics of the items being unitized. The load shall be contained in a manner that will permit safe handling during shipment and storage.

(g) Marking:

(1) All unit packages, intermediate packs, exterior shipping containers, and, as applicable, unitized loads shall be marked in accordance with MIL-STD-129, Revision P(3), dated 29 Oct. 2004, including bar coding. The contractor is responsible for application of special markings as discussed in the Military Standard regardless of whether specified in the contract/order or not. Special markings include, but are not limited to, Shelf-life markings, structural markings, and transportation special handling markings. The marking of pilferable and sensitive materiel will not identify the nature of the materiel. NOTE: Passive RFID tagging is required in all contracts that contain DFARS clause 252.211-7006. Contractors must check the solicitation and/or contract for this clause.

(2) Contractors and vendors shall apply identification and address markings with bar codes in accordance with this standard. For shipments moving to overseas locations and for mobile deployable units, the in-the-clear address must also include the host country geographic address and the APO/FPO address. A Military Shipment Label (MSL) is required for all shipments except contractor to contractor. The MSL will include both linear and 2D bar codes per the standard. DVD shipment documentation must also be marked with additional bar codes. The DD Form 250 or the commercial packing list shall have additional issue/receipt bar coding applied as per Direct Vendor Delivery Shipments in the standard (except for deliveries to DLA Distribution Depots, e.g. New Cumberland, San Joaquin, Red River, Anniston). Packing lists are required in accordance with the Standard, see paragraph 5.3.

(3) Contractor to contractor shipments shall have the address markings applied to the identification marked side of the exterior shipping container or to the unitized load markings. The following shall be marked "FROM: name and address of consignor and TO: name and address of consignee."

(4) Commercial software may be used to generate a Military Shipment Label / Issue Receipt Document (MSL/IRRD)including the required Code 39 and 2D (PDF417) bar codes. However, the commercial software must produce labels/documents which comply with the requirements of MIL-STD-129P. Contractors shall insure that the ship to and mark for in-the-clear delivery address is complete including: consignees name, organization, department name, office, building, room, street address, city, state, country code, and DODAAC. (Army developed software, for creating MSL/IRRD previously available to those with government contracts is no longer supported.)

(h) Hazardous Materials (As applicable):

(1) Hazardous Materials is defined as a substance or waste which has been determined by the Secretary of Transportation to be capable of posing an unreasonable risk to health, safety, and property when transported in commerce and which has been so designated. (This includes all items listed as hazardous in Titles 29, 40 and 49 CFR and other applicable modal regulations effective at the time of shipment.)

(2) Packaging and marking for hazardous material shall comply with the requirements herein for the mode of transport and the applicable performance packaging contained in the following documents:

- International Air Transport Association (IATA) Dangerous Goods Regulations
- International Maritime Dangerous Goods Code (IMDG)
- Code of Federal Regulations (CFR) Title 29, Title 40 and Title 49
- Joint Service Regulation AFJMAN24-204/TM38-250/NAVSUPPUB 505/MCO P4030.19/DLAM 4145.3 (for military air shipments).

(3) If the shipment originates from outside the continental United States, the shipment shall be prepared in accordance with the United Nations Recommendations on the Transport of Dangerous Goods in a manner acceptable to the Competent Authority of the nation of origin and in accordance with regulations of all applicable carriers.

(4) A Product Material Safety Data Sheets (MSDS) is required to be included with every unit pack and intermediate container and shall be included with the packing list inside the sealed pouch attached to the outside of the package.

(i) Heat Treatment and Marking of Wood Packaging Materials: Boxes/pallets and any wood used as inner packaging made of non-manufactured wood shall be heat-treated. All non-manufactured wood used in packaging shall be heat treated to a core temperature of 56 degrees Celsius for a minimum of 30 minutes. The box/pallet manufacturer and the manufacturer of wood used as inner packaging shall be affiliated with an inspection agency accredited by the board of review of the American Lumber Standard Committee. The box/pallet manufacturer and the manufacturer of wood used as inner packaging shall ensure traceability to the original source of heat treatment. Marking. Each box/pallet shall be marked to show the conformance to the International Plant Protection Convention Standard. The quality mark shall be placed on both ends of the outer packaging, between the end cleats or end battens; on two sides of the pallet. Foreign manufacturers shall have the heat treatment of non-manufactured wood products verified in accordance with their National Plant Protection Organization's compliance program. In addition, wood used as dunnage for blocking and bracing shall be ordered with ALSC certified marking for dunnage or the markings may be applied locally at two foot intervals.

(j) Quality Assurance: The contractor is responsible for establishing a quality system. Full consideration to examinations, inspections, and tests will be given to ensure the acceptability of the commercial package.

(k) SUPPLEMENTAL INSTRUCTIONS: USE BEST COMMERCIAL PACKAGING

[End of Clause]

D-3	252.211-7006	RADIO FREQUENCY IDENTIFICATION (reflects DoD Class Deviation 2006-O0003)	MAY/2006

Note: This clause requires contractors to affix passive (as defined in the clause) RFID tags at the case and palletized unit load level when shipping parts to the depots shown in paragraph b(1)(ii) below. "New Cumberland" is a part of Susquehanna. Shipements to New Cumberland require RFID tagging where the DoDAAC is either W25G1U or SW3124. Procurement Technical Assistance Centers (PTACs) http://www.dla.mil/db/procurem.htm can assist contractors with this RFID requirement. Check with one in your region.

(a) Definitions. As used in this clause

Advance shipment notice means an electronic notification used to list the contents of a shipment of goods as well as additional information relating to the shipment, such as order information, product description, physical characteristics, type of packaging, marking, carrier information, and configuration of goods within the transportation equipment.

Bulk commodities means the following commodities, when shipped in rail tank cars, tanker trucks, trailers, other bulk wheeled conveyances, or pipelines:

(1) Sand.

(2) Gravel.

(3) Bulk liquids (water, chemicals, or petroleum products).

(4) Ready-mix concrete or similar construction materials.

(5) Coal or combustibles such as firewood.

(6) Agricultural products such as seeds, grains, or animal feed.

Case means either a MIL-STD-129 defined exterior container within a palletized unit load or a MIL-STD-129 defined individual shipping container.

Electronic Product Code\'99 (EPC) means an identification scheme for universally identifying physical objects via RFID tags and other means. The standardized EPC data consists of an EPC (or EPC identifier) that uniquely identifies an individual object, as well as an optional filter value when judged to be necessary to enable effective and efficient reading of the EPC tags. In addition to this standardized data, certain classes of EPC tags will allow user-defined data. The EPC tag data standards will define the length and position of this data, without defining its content.

EPCglobal\'99 means a joint venture between EAN International and the Uniform Code Council to establish and support the EPC network as the global standard for immediate, automatic, and accurate identification of any item in the supply chain of any company, in any industry, anywhere in the world.

Exterior container means a MIL-STD-129 defined container, bundle, or assembly that is sufficient by reason of material, design, and construction to protect unit packs and intermediate containers and their contents during shipment and storage. It can be a unit pack or a container with a combination of unit packs or intermediate containers. An exterior container may or may not be used as a shipping container.

Palletized unit load means a MIL-STD-129 defined quantity of items, packed or unpacked, arranged on a pallet in a specified manner and secured, strapped, or fastened on the pallet so that the whole palletized load is handled as a single unit. A palletized or skidded load is not considered to be a shipping container. A loaded 463L System pallet is not considered to be a palletized unit load. Refer to the Defense Transportation Regulation, DoD 4500.9-R, Part II, Chapter 203, for marking of 463L System pallets.

Passive RFID tag means a tag that reflects energy from the reader/interrogator or that receives and temporarily stores a small amount of energy from the reader/interrogator signal in order to generate the tag response.

(1) Until February 27, 2007, the acceptable tags are

(i) EPC Class 0 passive RFID tags that meet the EPCglobal Class 0 specification; and

(ii) EPC Class 1 passive RFID tags that meet the EPCglobal Class 1 specification. This includes both the Generation 1 and Generation 2 Class 1 specifications.

(2) Beginning March 1, 2007, the only acceptable tags are EPC Class 1 passive RFID tags that meet the EPCglobal Class 1 Generation 2 specification. Class 0 and Class 1 Generation 1 tags will no longer be accepted after February 28, 2007.

Radio Frequency Identification (RFID) means an automatic identification and data capture technology comprising one or more reader/interrogators and one or more radio frequency transponders in which data transfer is achieved by means of suitably modulated inductive or radiating electromagnetic carriers.

Shipping container means a MIL-STD-129 defined exterior container that meets carrier regulations and is of sufficient strength, by reason of material, design, and construction, to be shipped safely without further packing (e.g., wooden boxes or crates, fiber and metal drums, and corrugated and solid fiberboard boxes).

(b)

(1) Except as provided in paragraph (b)(2) of this clause, the Contractor shall affix passive RFID tags, at the case and palletized unit load packaging levels, for shipments of items that

(i) Are in any of the following classes of supply, as defined in DoD 4140.1-R, DoD Supply Chain Materiel Management Regulation, AP1.1.11:

(A) Subclass of Class I Packaged operational rations.

(B) Class II Clothing, individual equipment, tentage, organizational tool kits, hand tools, and administrative and housekeeping supplies and equipment.

(C) Class IIIP Packaged petroleum, lubricants, oils, preservatives, chemicals, and additives.

(D) Class IV Construction and barrier materials.

(E) Class VI Personal demand items (non-military sales items).

(F) Subclass of Class VIII Medical materials (excluding pharmaceuticals, biologicals, and reagents).

(G) Class IX Repair parts and components including kits, assemblies and subassemblies, reparable and consumable items required for maintenance support of all equipment, excluding medical-peculiar repair parts; and

(ii) Are being shipped to any of the following locations:

(A) Defense Distribution Depot, Susquehanna, PA: DoDAAC W25G1U or SW3124.

(B) Defense Distribution Depot, San Joaquin, CA: DoDAAC W62G2T or SW3224.

(C) Defense Distribution Depot, Albany, GA: DoDAAC SW3121.

(D) Defense Distribution Depot, Anniston, AL: DoDAAC W31G1Z or SW3120.

(E) Defense Distribution Depot, Barstow, CA: DoDAAC SW3215.

(F) Defense Distribution Depot, Cherry Point, NC: DoDAAC SW3113.

(G) Defense Distribution Depot, Columbus, OH: DoDAAC SW0700.

(H) Defense Distribution Depot, Corpus Christi, TX: DoDAAC W45H08 or SW3222.

(I) Defense Distribution Depot, Hill, UT: DoDAAC SW3210.

(J) Defense Distribution Depot, Jacksonville, FL: DoDAAC SW3122.

(K) Defense Distribution Depot, Oklahoma City, OK: DoDAAC SW3211.

(L) Defense Distribution Depot, Norfolk, VA: DoDAAC SW3117.

(M) Defense Distribution Depot, Puget Sound, WA: DoDAAC SW3216.

(N) Defense Distribution Depot, Red River, TX: DoDAAC W45G19 or SW3227.

(O) Defense Distribution Depot, Richmond, VA: DoDAAC SW0400.

(P) Defense Distribution Depot, San Diego, CA: DoDAAC SW3218.

(Q) Defense Distribution Depot, Tobyhanna, PA: DoDAAC W25G1W or SW3114.

(R) Defense Distribution Depot, Warner Robins, GA: DoDAAC SW3119.

(S) Air Mobility Command Terminal, Charleston Air Force Base, Charleston, SC: Air Terminal Identifier Code CHS.

(T) Air Mobility Command Terminal, Naval Air Station, Norfolk, VA: Air Terminal Identifier Code NGU.

(U) Air Mobility Command Terminal, Travis Air Force Base, Fairfield, CA: Air Terminal Identifier Code SUU.

(2) Bulk commodities are excluded from the requirements of paragraph (b)(1) of this clause.

(c) The Contractor shall ensure that

(1) The data encoded on each passive RFID tag are unique (i.e., the binary number is never repeated on any and all contracts) and conforms to the requirements in paragraph (d) of this clause;

(2) Each passive tag is readable; and

(3) The passive tag is affixed at the appropriate location on the specific level of packaging, in accordance with MIL-STD-129 (Section 4.9.2) tag placement specifications.

(d) Data syntax and standards. The Contractor shall encode an approved RFID tag using the instructions provided in the most recent EPC\'99 Tag Data Standards document, available at http://www.epcglobalinc.org/standards_technology/specifications.html.

(1) If the Contractor is an EPCglobal\'99 subscriber and possesses a unique EPC\'99 company prefix, the Contractor may use any of the identity types and encoding instructions described in the most recent EPC\'99 Tag Data Standards document to encode tags.

(2) If the Contractor chooses to employ the DoD Identity Type, the Contractor shall use its previously assigned Commercial and Government Entity (CAGE) Code and shall encode the tags in accordance with the tag identity type details located at http://www.acq.osd.mil/log/rfid/tag_data.htm. If the Contractor uses a third party packaging house to encode its tags, the CAGE code of the third party packaging house is acceptable.

(3) Regardless of the selected encoding scheme, the Contractor is responsible for ensuring that each tag contains a globally unique identifier.

(e) Receiving report. The Contractor shall electronically submit advance shipment notice(s) with the RFID tag identification (specified in paragraph (d) of this clause) in advance of the shipment in accordance with the procedures at http://www.acq.osd.mil/log/rfid/advance_shipment_ntc.htm.

[End of Clause]

D-4 52.247-4016 HEAT TREATMENT AND MARKING OF WOOD PACKAGING MATERIALS AUG/2005
(TACOM)

Boxes/pallets and any wood used as inner packaging made of non-manufactured wood shall be heat-treated. All non-manufactured wood used in packaging shall be heat treated to a core temperature of 56 degrees Celsius for a minimum of 30 minutes. The box/pallet manufacturer and the manufacturer of wood used as inner packaging shall be affiliated with an inspection agency accredited by the board of review of the American Lumber Standard Committee. The box/pallet manufacturer and the manufacturer of wood used as inner packaging shall ensure traceability to the original source of heat treatment.

Marking. Each box/pallet shall be marked to show the conformance to the International Plant Protection Convention Standard. The quality mark shall be placed on both ends of the outer packaging, between the end cleats or end battens; on two sides of the pallet. Foreign manufacturers shall have the heat treatment of non-manufactured wood products verified in accordance with their National Plant Protection Organization's compliance program. In addition, wood used as dunnage for blocking and bracing shall be ordered with ALSC certified marking for dunnage or the markings may be applied locally at two foot intervals.

[End of Clause]

SECTION E - INSPECTION AND ACCEPTANCE

	Regulatory Cite	Title	Date
E-1	52.246-2	INSPECTION OF SUPPLIES--FIXED-PRICE	AUG/1996
E-2	52.246-4	INSPECTION OF SERVICES - FIXED-PRICE	AUG/1996
E-3	52.246-16	RESPONSIBILITY FOR SUPPLIES	APR/1984
E-4	52.211-4029 (TACOM)	INTERCHANGEABILITY OF COMPONENTS	MAY/1994

(a) DESIGN CHANGES TO ITEMS NOT UNDER GOV'T DESIGN CONTROL. Once the Government accepts the first production test item, or accepts the first end item you deliver, (whichever comes first) you must not make design changes to any item or part that is not under Government design control.

(b) WHEN THE POLICY CAN BE WAIVED. The Procuring Contracting Officer (PCO) will consider waiving this policy at your request. If your request reaches the CO after the first production item test has been performed, then we may conduct another first production test at your expense.

(c) PRODUCTION OR DELIVERY DELAYS. Any production or delivery delays caused by this retesting will not be the basis for:

(1) an "excusable delay" as defined in the DEFAULT clause of this contract.

(2) be the basis for an increase in contract price or delivery schedule extension.

[End of clause]

E-5	52.246-4008 (TACOM)	FINAL INSPECTION RECORD (FIR)	APR/2000

(a) The Contractor shall prepare a Final Inspection Record (FIR) in his/her own format for each vehicle under the contract. The FIR should be organized so as to be compatible with assemblies, installation, and end item performance and acceptance. The FIR shall contain all examinations and tests that are performed on a single unit during its manufacture and final inspection. The FIR shall list each vehicle characteristic or function to be inspected from the vehicle specification. As a minimum, the FIR shall have blocks for the contractor's inspector's initials indicating that each characteristic or function was inspected and either accepted or rejected, and another block for reinspection and acceptance of any rejected characteristic or function. Final review and acceptability shall be indicated by a signature block containing the full name and title of the company official rendering approval. The FIR shall be updated to reflect all engineering and/or manufacturing changes that impact the FIR, during the entire contract period. The contractor shall submit the completed and certified copy of the FIR to the Government Inspector with each item inspected and offered for acceptance by the Government.

(b) Deficiencies disclosed during inspection by the contractor shall be described in writing and included as part of the FIR.

(c) If the contractor determines that the FIR is not appropriate for final inspection of the end item, for any reason, s/he must obtain written approval from the contracting officer prior to employing any other form for this purpose.

[End of Clause]

E-6	52.246-4028 (TACOM)	INSPECTION AND ACCEPTANCE POINTS: ORIGIN	NOV/2005

The Government's inspection and acceptance of the supplies offered under this contract/purchase order shall take place at ORIGIN. Offeror must specify below the exact name, address, and CAGE of the facility where supplies to be furnished under this contract/purchase order will be available for inspection/acceptance.

INSPECTION POINT: General Dynamics Santa Barbara Sistemas GmbH, D9913
(Name) (CAGE)

Barbarossastrasse 30, 67655 Kaiserslautern/Germany
(Address) (City) (State) (Zip)

ACCEPTANCE POINT: Barbarossastrasse 30, 67655 Kaiserslautern/Germany

[End of Clause]

E-7 52.246-4048 DRAWINGS FOR INSPECTION FEB/2007
(TACOM)

The Contractor shall make available to the Government Inspector, at the time of production inspection, legible drawings and printed specifications to which the product was manufactured. These drawings and specifications shall be annotated as to the latest revision incorporated therein. Upon completion of product inspection and acceptance by the Government Inspector, all drawings and specifications will be returned to the Contractor.

If the contractor is not the actual manufacturer of the item being procured (i.e dealer, distributor, etc.), and is unable to provide the drawings, a Certificate of Conformance (COC) as outlined in FAR 52.246-15 is acceptable in lieu of the drawings/specifications. The COC must specify both the drawing and specification revision designations (e.g., Revision C) of the items being provided.

[End of Clause]

SECTION F - DELIVERIES OR PERFORMANCE

	Regulatory Cite	Title	Date
F-1	52.242-15	STOP-WORK ORDER	AUG/1989
F-2	52.242-17	GOVERNMENT DELAY OF WORK	APR/1984
F-3	52.247-29	F.O.B. ORIGIN	FEB/2006
F-4	52.247-52	CLEARANCE AND DOCUMENTATION REQUIREMENTS--SHIPMENTS TO DOD AIR OR WATER TERMINAL TRANSSHIPMENT POINTS	APR/1984
F-5	52.247-58	LOADING, BLOCKING, AND BRACING OF FREIGHT CAR SHIPMENTS	APR/1984
F-6	52.247-59	F.O.B. ORIGIN--CARLOAD AND TRUCKLOAD SHIPMENTS	APR/1984
F-7	52.242-4457 (TACOM)	DELIVERY SCHEDULE FOR DELIVERY ORDERS	SEP/2006

(a) Offers that propose a delivery schedule that will not clearly fall within the applicable required delivery schedule specified below MAY BE CONSIDERED NONRESPONSIVE AND NOT ELIGIBLE FOR AWARD. If you believe that the delivery schedule or monthly maximum quantity is unrealistic, contact the buyer listed on the cover sheet of this solicitation at least 14 days prior to solicitation closing date.

(b) DEFINITIONS:

(1) DAYS means the number of days after the date of contract award when you must deliver the stated quantity (QTY) of supplies.

(2) DELIVERY is defined as follows:

FOB Origin - Contractor is required to deliver its shipment as provided in FAR 52.247-29(a)(1)-(4) by the time specified in the individual contract; or

FOB Destination - Contractor is required to deliver its shipment as provided in FAR 52.247-34(a)(1)-(2) by the time specified in the individual contract. The contractor must take into consideration the length of time necessary to deliver its shipment to the destination designated in the contract, to ensure that the item reaches its destination by the time reflected in the contract.

(c) The Government requires deliveries according to the following schedule on all orders:

GOVERNMENT REQUIRED DELIVERY SCHEDULE:

(i) If FAT is required, start deliveries N/A days after the delivery order date; or

(ii) If FAT is not required or FAT is waived, start deliveries 120 days after delivery order date.

(iii) You will deliver a maximum of 24 units every thirty days.

(iv) You can deliver more than the maximum number of units every thirty days at no additional cost to the government.

(d) If the offeror does not propose an accelerated delivery schedule, the required delivery schedule above will apply. If you wish to propose an accelerated delivery schedule at no additional cost, fill in the appropriate information here:

CONTRACTOR PROPOSED ACCELERATED DELIVERY SCHEDULE:

(i) If FAT is required, deliveries will start ___ days after the delivery order date; or

(ii) If FAT is not required or FAT is waived, deliveries will start 300 days after delivery order date.

(iii) We will deliver a maximum of 26 units every thirty days.

(e) You can accelerate delivery after contract award at no additional cost to the government.

[End of Clause]

F-8	52.211-16	VARIATION IN QUANTITY	APR/1984

(a) A variation in the quantity of any item called for by this contract will not be accepted unless the variation has been caused by conditions of loading, shipping, or packing, or allowances in manufacturing processes, and then only to the extent, if any, specified in paragraph (b) below.

(b) The permissible variation shall be limited to:

__ZERO__ percent increase; and
__ZERO__ percent decrease.

(c) This increase or decrease shall apply to THE TOTAL CONTRACTUAL QUANTITY.

[End of Clause]

F-9 52.247-60 GUARANTEED SHIPPING CHARACTERISTICS DEC/1989

(a) The offeror is requested to complete subparagraph (a)(1) of this clause, for each part or component which is packed or packaged separately. This information will be used to determine transportation costs for evaluation purposes. If the offeror does not furnish sufficient data in subparagraph (a)(1) of this clause, to permit determination by the Government of the item shipping costs, evaluation will be based on the shipping characteristics submitted by the offeror whose offer produces the highest transportation costs or in the absence thereof, by the Contracting Officer's best estimate of the actual transportation costs. If the item shipping costs, based on the actual shipping characteristics, exceed the item shipping costs used for evaluation purposes, the Contractor agrees that the contract price shall be reduced by an amount equal to the difference between the transportation costs actually incurred, and the costs which would have been incurred if the evaluated shipping characteristics had been accurate.

(1) To be completed by the offeror:

(i) Type of "Outer" container: Wood Box _____, Fiber Box _____, Barrel _____, Reel _____, Drum _____, Other (Specify) _____

(ii) Shipping configuration: Knocked-down _____, Set-up _____, Nested _____, Other (specify) separate;

(iii) Size of outer container: 273 inches (Length), x 105 inches (Width), x 131 inches (Height) = 2175 Cubic FT;

(iv) Number of items per outer container 1 Each;

(v) Gross weight of outer container and contents _____ LBS

(vi) Palletized/skidded x Yes _____ No;

(vii) Number of outer containers per pallet/skid 1;

(viii) Weight of empty pallet bottom/skid and sides 220 LBS;

(ix) Size of pallet/skid and contents 14,470 LBS Cube 2175;

(x) Number of outer containers or pallets/skids per railcar 2* --

Size of railcar _____

Type of railcar flat

(xi) Number of outer containers or pallets/skids per trailer 2 *--

Size of trailer 40'

Type of trailer flat bed

*Number of complete units (contract line item) to be shipped in carrier's equipment.

(2) To be completed by the Government after evaluation but before contract award:

(i) Rate used in evaluation _____;

(ii) Tender/Tariff _____;

(iii) Item _____;

The guaranteed shipping characteristics requested in subparagraph (a)(1) of this clause do not establish actual transportation requirements, which are specified elsewhere in this solicitation. The guaranteed shipping characteristics will be used only for the purpose of evaluating offers and establishing any liability of the successful offeror for increased transportation costs resulting from actual shipping characteristics which differ from those used for evaluation in accordance with paragraph (a) of this clause.

[End of FAR Clause]

The following information is provided as guidance in filling out the above clause by paragraph. Note: Disregard asterisk (*) in the clause where it appears.

(a)(1)(i) Type of container (mandatory fill-in):

The type of container is defined as an overpack. This is an outer container usually made of steel, wood, or fiber designed to enclose and protect one or more less durable inner containers. When Other is selected you must also complete (a)(1)(ii) Shipping configuration.

(a)(1)(ii) Shipping configuration:
Complete this information when any one dimension of the item is reduced.

(a)(1)(iii) Size of container (mandatory fill-in):
Outer dimensions of the overpack or other described shipping configuration. Must be provided in inches. The cube shall be provided in cubic feet. The cube is defined as the volume of space occupied by the unit under consideration computed by multiplying overall exterior length, width, and height.

(a)(1)(iv) Number of items per container (mandatory fill-in):
The number of units of issue in the overpack or in the other described shipping configuration.

(a)(1)(v) Gross weight of container and contents (mandatory fill-in):
The combined mass of the overpack containing the packing material and the number of units of issue supplied in pounds.

(a)(1)(vi) Palletized/skidded:
Indicate Yes if overpack or other described shipping configuration is attached to pallet or skid to form a unit load for handling.

(a)(1)(vii) Number of containers per pallet/skid:
Only complete this if you answered Yes to (a)(1)(vi). Containers are the number of overpacks or other described shipping configurations attached to a pallet or skid base.

(a)(1)(viii) Weight of empty pallet bottom/skid and sides:
Only complete this if you answered Yes to (a)(1)(vi) or when the weight of the container and contents in (a)(1)(v) above does not include this weight.

(a)(1)(ix) Size of pallet/skid and contents:
Only complete this if you answered Yes to (a)(1)(vi). Indicate weight in pounds and cube in cubic feet of combined overpack or other described shipping configuration and attached pallet or skid. The cube is defined as the volume of space occupied by the unit under consideration computed by multiplying overall exterior length, width, and height.

(a)(1)(x) Number of containers or pallets/skids per railcar:
Only complete this if you have rail capability and the rail car may be fully utilized. Quantity of overpacks or other described shipping configurations that will fit in a fully utilized railcar. Specify length in feet and type (flat, box, gondola, etc.) of railcar.

(a)(1)(xi) Number of containers or pallets/skids per trailer (mandatory fill-in): Quantity of overpacks or other described shipping configurations that will fit in a fully utilized trailer. Specify length in feet and type (flatbed, van, etc.) of trailer. For import/export shipments in ISO/seavan containers indicate quantity of overpacks or other described shipping configurations fully utilizing the container. Specify length in feet of the ISO/seavan containers.

NOTE: "Fully Utilized" means filling to full visible capacity.

F-10 52.247-65 F.O.B. ORIGIN--PREPAID FREIGHT--SMALL PACKAGE SHIPMENTS JAN/1991

(a) When authorized by the Contracting Officer, f.o.b. origin freight shipments which do not have a security classification shall

move on prepaid commercial bills of lading or other shipping documents to domestic destinations, including air and water terminals. Weight of individual shipments shall be governed by carrier restrictions but shall not exceed 150 pounds by any form of commercial air or 1,000 pounds by other commercial carriers. The Government will reimburse the Contractor for reasonable freight charges.

(b) The Contractor shall annotate the commercial bill of lading as required by the clause of this contract entitled Commercial Bill of Lading Notations.

(c) The Contractor shall consolidate prepaid shipments in accordance with procedures established by the cognizant transportation office. The Contractor is authorized to combine Government prepaid shipments with the Contractor's commercial shipments for delivery to one or more consignees and the Government will reimburse its pro rata share of the total freight costs. The Contractor shall provide a copy of the commercial bill of lading promptly to each consignee. Quantities shall not be divided into mailable lots for the purpose of avoiding movement by other modes of transportation.

(d) Transportation charges will be billed as a separate item on the invoice for each shipment made. A copy of the pertinent bill of lading, shipment receipt, or freight bill shall accompany the invoice unless otherwise specified in the contract.

(e) Loss and damage claims will be processed by the Government.

[End of Clause]

F-11 52.247-4005 SHIPMENT OF SUPPLIES AND DETENTION OF CARRIERS EQUIPMENT AUG/2003
(TACOM)

(a) Unless otherwise directed, shipment items under this contract in following order of priority:

(1) Government/Commercial Bill(s) of Lading or US Postal Services;

(2) Prepaid Commercial Bill(s) of Lading with transportation charges entered as a separate item on the invoice; or

(3) As otherwise instructed when the contract prohibits use of Government funds for transportation costs.

(b) The Contractor will request:

(1) Government Bills of Lading and

(2) Routing and other instructions, including Defense Transportation Regulation (DTR), DOD Regulation 4500.9-R-Part 2 Cargo Movement, as to the methods of shipment to be followed by the Contractor, or

(c) The Contractor and subcontractor(s) must allow prompt and convenient access of carrier's equipment to loading docks or platforms where the contract items supplies will be loaded. Any charges for detention of carrier's equipment shall be for the account of the Contractor, except when the detention is required or caused by the Government.

[End of Clause]

F-12 52.247-4010 TRANSPORTATION DATA FOR FOB ORIGIN OFFERS FEB/1994
(TACOM)

(a) Provide the following information for us to use in selecting the most favorable mode of shipment. We'll also use this information in our evaluation of transportation costs.

Offeror represents that:

(1) Facilities for shipping by rail

[x] are
[ ] are not

available at the F.O.B. point(s) stated in this solicitation.

(2) If rail facilities are not available at the F.O.B. point(s), the name and location of the nearest team track is:

_____ _____
(NAME) (LOCATION)

(3) Facilities for shipping by water

[ ] are
[x] are not

available at the F.O.B. point(s) stated in this solicitation.

(4) Facilities for shipping by motor

[x] are
[ ] are not

available at the F.O.B. point(s) stated in this solicitation.

(5) If there is a Contractor Reimbursable Loading Charge and you didn't include it in the offered unit price in Section B, please indicate it below, per unit:

RAIL:_____/Unit MOTOR:_____/Unit WATER:_____ /Unit

CAUTION: GIVE THE COST OF REIMBURSABLE LOADING CHARGE (NOT ALREADY IN THE OFFERED UNIT PRICE) ON A PER UNIT BASIS. THE UNIT OF MEASURE IS AS INDICATED ON THE SCHEDULE PAGE, SECTION B, UNDER THE UNIT COLUMN.

(b) We will consider any charge listed above in the overall transportation evaluation of this solicitation. Unless you fill-in the above information for loading charges, we will consider all costs associated with loading to be included in the item price offered in Section B. These costs include: (i) loading, (ii) blocking, (iii) bracing, (iv) drayage, (v) switching, or (vi) any other service necessary to effect delivery F.O.B. carrier's equipment you've indicated as available and we specify at time of shipment.

(c) If rail facilities aren't available at the designated F.O.B. point(s), rail won't be used unless directed by the Administrative Contracting Officer (ACO). If the ACO tells you rail facilities will be used, we'll adjust the contract price by adding the loading charge filled in above for transportation to the nearest rail facility.

(d) IF YOU DO NOT FILL IN AN ADDITIONAL CHARGE FOR RAIL SHIPMENT ABOVE, YOU AGREE THAT THE CONTRACT PRICE ALREADY INCLUDES ALL CHARGES FOR SUCH SHIPMENTS. THEREFORE, SHIPMENT BY RAIL WILL NOT COST US ANY MORE.

[End of Clause]

F-13 52.247-4011 (TACOM) FOB POINT SEP/1978

Delivery on F.O.B. origin offers will be F.O.B. Carrier's equipment, wharf, or freight station, at the Government's option, at or near:

(1) Contractor's Plant: Kaiserslautern (City) Barbarossa Str. 30 (State) 67655 (ZIP) Germany (County)

(2) Subcontractor's Plant: N/A (City) (State) (ZIP) (County)

[End of Clause]

F-14 52.247-4017 (TACOM) DEPOT ADDRESS FOR THE APPLICABLE MODE OF SHIPMENTS: IN-THE-CLEAR ADDRESSES MAY/2004

Rail/ Motor SPLC*	MILSTRIP Address Code	Rail Ship To:	Motor Ship To:	Parcel Post Mail To:
206721/ 209405	W25G1U	Transportation Officer Defense Dist Depot Susquehanna New Cumberland, PA	Transportation Officer Defense Dist Depot Susquehanna New Cumberland, PA	Transportation Officer Defense Dist Depot Susquehanna New Cumberland, PA 17070-5001

NOTE: All deliveries to New Cumberland MUST be scheduled at least 10 days prior to the delivery date. The carrier or contractor must call the New Cumberland DDSP customer service number, 800-307-8496 and provide the following information: contract number, item name, National Stock Number, total weight and cube, and vendor. All shipments to this MILSTRIP address code (W25G1U) are for mission stock and they will need to know that as well, but if you have instructions from the Contracting Officer to use MILSTRIP address code W25N14 instead, you must inform the appointment-taker that the delivery is for Consolidation and Containerization Point (CCP) stock. Appointments for FOB Origin shipments should be coordinated with DCMA Transportation.

875670/ 875675	W62G2T	Transportation Officer XU Def Dist Depot San Joaquin 25600 S Chrisman Rd Rec Whse 10 Tracy, Ca 95376-5000	Transportation Officer XU Def Dist Depot San Joaquin 25600 S Chrisman Rd Rec Whse 10 Tracy, Ca 95376-5000	Transportation Officer Dist Depot San Joaquin P O Box 96001 Stockton, CA 95296-0130
471995/ 471996	W31G1Z	Transportation Officer Anniston Army Depot, Bynum, AL	Transportation Officer Anniston Army Depot, Bynum, AL	Transportation Officer Anniston Army Depot, Anniston, AL 36201-5021
209741/ 209770	W25G1R	Transportation Officer Letterkenny Army Depot, Culbertson, PA	Transportation Officer Letterkenny Army Depot, Chambersburg, PA	Transportation Officer Letterkenny Army Depot, Chambersburg, PA 17201-4150
661136/ 661157	W45G19	Transportation Officer Red River Army Depot, Defense, TX	Transportation Officer Red River Army Depot, Texarkana, TX	Transportation Officer Red River Army Depot, Texarkana, TX 75507-5000
764538/ 764535	W67G23	Transportation Officer Tooele Army Depot, Warner, UT	Transportation Officer Tooele Army Depot, Tooele, UT	Transportation Officer Tooele Army Depot, Tooele, UT 84074-5003

***SPLC indicates Standard Point Locator Code.

NOTE: The following is applicable only when so specified in an individual order or delivery increment:

This requirement is a depot replenishment buy, a portion of which is or may be required to fill Direct Support System (DSS) requisitions. Shipment shall be made, as specified, to one or more of:

New Cumberland Army Depot
Red River Army Depot
Sharpe Army Depot

prior to shipments to any other depots as may be designated. When more than one depot is designated for DSS shipments, priority shipments will be made equally to each of the designated destinations.

[End of Clause]

SECTION G - CONTRACT ADMINISTRATION DATA

	Regulatory Cite	Title	Date
G-1	252.232-7003	ELECTRONIC SUBMISSION OF PAYMENT REQUESTS	JAN/2004
G-2	252.204-7006	BILLING INSTRUCTIONS	OCT/2005

When submitting a request for payment, the Contractor shall--

(a) Identify the contract line item(s) on the payment request that reasonably reflect contract work performance; and

(b) Separately identify a payment amount for each contract line item included in the payment request.

[End of Clause]

G-3	52.204-4011 (TACOM)	PAYMENT INSTRUCTIONS FOR THE DEFENSE FINANCE AND ACCOUNTING SERVICE (DFAS)	OCT/2005

In accordance with DFARS PGI 204.7108, the contract shall be paid in accordance with DFARS PGI 204.7108(d)(5), line item specific by cancellation date.

[End of Clause]

SECTION H - SPECIAL CONTRACT REQUIREMENTS

	Regulatory Cite	Title	Date
H-1	252.203-7002	DISPLAY OF DOD HOTLINE POSTER	DEC/1991
H-2	252.204-7000	DISCLOSURE OF INFORMATION	DEC/1991
H-3	252.205-7000	PROVISION OF INFORMATION TO COOPERATIVE AGREEMENT HOLDERS	DEC/1991
H-4	252.225-7002	QUALIFYING COUNTRY SOURCES AS SUBCONTRACTORS	APR/2003
H-5	252.225-7004	REPORTING OF CONTRACT PERFORMANCE OUTSIDE THE UNITED STATES	JUN/2005
H-6	252.225-7005	IDENTIFICATION OF EXPENDITURES IN THE UNITED STATES	JUN/2005
H-7	252.225-7006	QUARTERLY REPORTING OF ACTUAL CONTRACT PERFORMANCE OUTSIDE THE UNITED STATES	APR/2005
H-8	252.225-7013	DUTY-FREE ENTRY	JUN/2005
H-9	252.225-7021	TRADE AGREEMENTS	FEB/2006
H-10	252.225-7033	WAIVER OF UNITED KINGDOM LEVIES	APR/2003
H-11	252.225-7043	ANTITERRORISM/FORCE PROTECTION POLICY FOR DEFENSE CONTRACTORS OUTSIDE THE UNITED STATES (See DFARS 225.7401(b) for paragraph C fill-in.)	MAR/2006
H-12	252.226-7001	UTILIZATION OF INDIAN ORGANIZATIONS, INDIAN-OWNED ECONOMIC ENTERPRISES, AND NATIVE HAWAIIAN SMALL BUSINESS CONCERNS	SEP/2004
H-13	252.228-7003	CAPTURE AND DETENTION	DEC/1991
H-14	252.231-7000	SUPPLEMENTAL COST PRINCIPLES	DEC/1991
H-15	252.246-7000	MATERIAL INSPECTION AND RECEIVING REPORT	MAR/2003
H-16	252.246-7001	WARRANTY OF DATA	DEC/1991
H-17	252.237-7019	TRAINING FOR CONTRACTOR PERSONNEL INTERACTING WITH DETAINEES	AUG/2005

(a) Definitions. As used in this clause--

Combatant Commander means the commander of a unified or specified combatant command established in accordance with 10 U.S.C. 161.

Detainee means a person in the custody or under the physical control of the Department of Defense on behalf of the United States Government as a result of armed conflict or other military operation by United States armed forces.

Personnel interacting with detainees means personnel who, in the course of their duties, are expected to interact with detainees.

(b) Training requirement. This clause implements Section 1092 of the National Defense Authorization Act for Fiscal Year 2005 (Pub. L. 108-375).

(1) The Combatant Commander responsible for the area where a detention or interrogation facility is located will provide training for contractor personnel interacting with detainees. The training will address the international obligations and laws of the United States applicable to the detention of personnel, including the Geneva Conventions. The Combatant Commander will issue a training receipt document to personnel who have completed the training.

(2)(i) The Contractor shall arrange for its personnel interacting with detainees to

(A) Receive the training specified in paragraph (b)(1) of this clause prior to interacting with detainees and annually thereafter; and

(B) Acknowledge receipt of the training through acknowledgement of the training receipt document specified in paragraph (b)(1) of this clause.

(ii) To make these arrangements, the following points of contact apply:

N/A

(3) The Contractor and its personnel interacting with detainees shall retain a copy of the training receipt document(s) issued and acknowledged in accordance with paragraphs (b)(1) and (2) of this clause until the contract is closed.

(c) Subcontracts. The Contractor shall include the substance of this clause, including this paragraph (c), in all subcontracts that may require contractor personnel to interact with detainees in the course of their duties.

H-18 252.217-7026 IDENTIFICATION OF SOURCES OF SUPPLY NOV/1995

(a) The Government is required under 10 U.S.C. 2384 to obtain certain information on the actual manufacturer or sources of supplies it acquires.

(b) The apparently successful Offeror agrees to complete and submit the following table before award:

TABLE

Line Items	National Stock Number	Commercial Item (Y or N)	Source of Supply Company	Source of Supply Address	Part No.	Actual Mfg?
(1)	(2)	(3)	(4)	(4)	(5)	(6)

(1) List each item of supply and item of technical data.

(2) If there is no national stock number, list "none."

(3) Use Y if the item is a commercial item; otherwise use N. If Y is listed, the Offeror need not complete the remaining columns in the table.

(4) For items of supply, list all sources. For technical data, list the source.

(5) For items of supply, list each source's part number for the item.

(6) Use Y if the source or supply is the actual manufacturer; N if it is not; and U if unknown.

[End of Clause]

H-19 252.225-7040 CONTRACTOR PERSONNEL SUPPORTING A FORCE DEPLOYED OUTSIDE THE UNITED STATES (Deviation per OSD memo 25 Jan 2007)) JUN/2006

(a) Definitions. As used in this clause--

Combatant Commander means the commander of a unified or specified combatant command established in accordance with 10 U.S.C. 161.

Theater of operations means an area defined by the combatant commander for the conduct or support of specific operations.

(b) General.

(1) This clause applies when contractor personnel deploy with or otherwise provide support in the theater of operations to U.S. military forces deployed outside the United States in--

(i) Contingency operations;

(ii) Humanitarian or peacekeeping operations; or

(iii) Other military operations or exercises designated by the Combatant Commander.

(2) Contract performance in support of U.S. military forces may require work in dangerous or austere conditions. The Contractor accepts the risks associated with required contract performance in such operations.

(3) Contractor personnel are not combatants and shall not undertake any role that would jeopardize their status. Contractor personnel shall not use force or otherwise directly participate in acts likely to cause actual harm to enemy armed forces.

(c) Support.

(1) The Combatant Commander will develop a security plan to provide protection, through military means, of Contractor personnel engaged in the theater of operations unless the terms of this contract place the responsibility with another party.

(2)(i) All Contractor personnel engaged in the theater of operations are authorized resuscitative care, stabilization, hospitalization at level III military treatment facilities, and assistance with patient movement in emergencies where loss of life, limb, or eyesight could occur. Hospitalization will be limited to stabilization and short-term medical treatment with an emphasis on return to duty or placement in the patient movement system.

(ii) When the Government provides medical treatment or transportation of Contractor personnel to a selected civilian facility, the Contractor shall ensure that the Government is reimbursed for any costs associated with such treatment or transportation.
(iii) Medical or dental care beyond this standard is not authorized unless specified elsewhere in this contract.

(3) Unless specified elsewhere in this contract, the Contractor is responsible for all other support required for its personnel engaged in the theater of operations under this contract.

(d) Compliance with laws and regulations. The Contractor shall comply with, and shall ensure that its personnel supporting a force deployed outside the United States as specified in paragraph (b)(1) of this clause are familiar with and comply with, all applicable--

(1) United States, host country, and third country national laws;

(2) Treaties and international agreements;

(3) United States regulations, directives, instructions, policies, and procedures; and

(4) Orders, directives, and instructions issued by the Combatant Commander relating to force protection, security, health, safety, or relations and interaction with local nationals.

(e) Pre-deployment requirements. The Contractor shall ensure that the following requirements are met prior to deploying personnel in support of U.S. military forces. Specific requirements for each category may be specified in the statement of work or elsewhere in the contract.

(1) All required security and background checks are complete and acceptable.

(2) All deploying personnel meet the minimum medical screening requirements and have received all required immunizations as specified in the contract. The Government will provide, at no cost to the Contractor, any theater-specific immunizations and/or medications not available to the general public.

(3) Deploying personnel have all necessary passports, visas, and other documents required to enter and exit a theater of operations and have a Geneva Conventions identification card from the deployment center.

(4) Country and theater clearance is obtained for personnel. Clearance requirements are in DoD Directive 4500.54, Official Temporary Duty Abroad, and DoD 4500.54-G, DoD Foreign Clearance Guide. Contractor personnel are considered non-DoD personnel traveling under DoD sponsorship.

(f) Processing and departure points. Deployed contractor personnel shall--

(1) Process through the deployment center designated in the contract, or as otherwise directed by the Contracting Officer, prior to deploying. The deployment center will conduct deployment processing to ensure visibility and accountability of contractor personnel and to ensure that all deployment requirements are met;

(2) Use the point of departure and transportation mode directed by the Contracting Officer; and

(3) Process through a Joint Reception Center (JRC) upon arrival at the deployed location. The JRC will validate personnel accountability, ensure that specific theater of operations entrance requirements are met, and brief contractor personnel on theater-specific policies and procedures.

(g) Personnel data.
(1) In accordance with DoD Instruction 3020.41, Contractor Personnel Authorized to Accompany the U.S. Armed Forces, the Contractor shall enter before deployment, or if already in the designated operational area, enter upon becoming an employee under the contract, and maintain current data, including departure data, for all Contractor personnel that are authorized to accompany U.S. Armed Forces deployed outside the United States as specified in paragraph (b)(1) of this clause. The automated web-based system to use for this effort is the Synchronized Predeployment and Operational Tracker (SPOT) (For information on how to register and enter data into this system, go to http://www.dod.mil/bta/products/spot.html).

(2) The Contractor shall ensure that all employees in the database have a current DD Form 93, Record of Emergency Data Card, on file with both the Contractor and the designated Government official. The Contracting Officer will inform the Contractor of the Government official designated to receive this data card.

(h) Contractor personnel.

(1) The Contracting Officer may direct the Contractor, at its own expense, to remove and replace any contractor personnel who jeopardize or interfere with mission accomplishment or who fail to comply with or violate applicable requirements of this clause. Such action may be taken at the Government's discretion without prejudice to its rights under any other provision of this contract, including

the Termination for Default clause.

(2) The Contractor shall have a plan on file showing how the Contractor would replace employees who are unavailable for deployment or who need to be replaced during deployment. The Contractor shall keep this plan current and shall provide a copy to the Contracting Officer upon request. The plan shall--

(i) Identify all personnel who are subject to military mobilization;

(ii) Detail how the position would be filled if the individual were mobilized; and

(iii) Identify all personnel who occupy a position that the Contracting Officer has designated as mission essential.

(i) Military clothing and protective equipment.

(1) Contractor personnel supporting a force deployed outside the United States as specified in paragraph (b)(1) of this clause are prohibited from wearing military clothing unless specifically authorized in writing by the Combatant Commander. If authorized to wear military clothing, Contractor personnel must wear distinctive patches, arm bands, nametags, or headgear, in order to be distinguishable from military personnel, consistent with force protection measures and the Geneva Conventions.

(2) Contractor personnel may wear military-unique organizational clothing and individual equipment (OCIE) required for safety and security, such as ballistic, nuclear, biological, or chemical protective clothing.

(3) The deployment center, or the Combatant Commander, shall issue OCIE and shall provide training, if necessary, to ensure the safety and security of contractor personnel.

(4) The Contractor shall ensure that all issued OCIE is returned to the point of issue, unless otherwise directed by the Contracting Officer.

(j) Weapons.

(1) If the Contractor requests that its personnel performing in the theater of operations be authorized to carry weapons, the request shall be made through the Contracting Officer to the Combatant Commander. The Combatant Commander will determine whether to authorize in-theater contractor personnel to carry weapons and what weapons will be allowed.

(2) The Contractor shall ensure that its personnel who are authorized to carry weapons--

(i) Are adequately trained;

(ii) Are not barred from possession of a firearm by 18 U.S.C. 922; and

(iii) Adhere to all guidance and orders issued by the Combatant Commander regarding possession, use, safety, and accountability of weapons and ammunition.

(3) Upon redeployment or revocation by the Combatant Commander of the Contractor's authorization to issue firearms, the Contractor shall ensure that all Government-issued weapons and unexpended ammunition are returned as directed by the Contracting Officer.

(k) Vehicle or equipment licenses. Contractor personnel shall possess the required licenses to operate all vehicles or equipment necessary to perform the contract in the theater of operations.

(l) Purchase of scarce goods and services. If the Combatant Commander has established an organization for the theater of operations whose function is to determine that certain items are scarce goods or services, the Contractor shall coordinate with that organization local purchases of goods and services designated as scarce, in accordance with instructions provided by the Contracting Officer.

(m) Evacuation.

(1) If the Combatant Commander orders a mandatory evacuation of some or all personnel, the Government will provide assistance, to the extent available, to United States and third country national contractor personnel.

(2) In the event of a non-mandatory evacuation order, unless authorized in writing by the Contracting Officer, the Contractor shall maintain personnel on location sufficient to meet obligations under this contract.

(n) Next of kin notification and personnel recovery.

(1) The Contractor shall be responsible for notification of the employee-designated next of kin in the event an employee dies, requires evacuation due to an injury, or is missing, captured, or abducted.

(2) In the case of missing, captured, or abducted contractor personnel, the Government will assist in personnel recovery actions in accordance with DoD Directive 2310.2, Personnel Recovery.

(o) Mortuary affairs. Mortuary affairs for contractor personnel who die while providing support in the theater of operations to U.S. military forces will be handled in accordance with DoD Directive 1300.22, Mortuary Affairs Policy.

(p) Changes. In addition to the changes otherwise authorized by the Changes clause of this contract, the Contracting Officer may, at any time, by written order identified as a change order, make changes in Government-furnished facilities, equipment, material, services, or site. Any change order issued in accordance with this paragraph (p) shall be subject to the provisions of the Changes clause of this contract.

(q) Subcontracts. The Contractor shall incorporate the substance of this clause, including this paragraph (q), in all subcontracts that require subcontractor personnel to be available to deploy with or otherwise provide support in the theater of operations to U.S. military forces deployed outside the United States in--

(1) Contingency operations;

(2) Humanitarian or peacekeeping operations; or

(3) Other military operations or exercises designated by the Combatant Commander.

[End of Clause]

H-20 52.204-4005 REQUIRED USE OF ELECTRONIC CONTRACTING SEP/2004

(a) All contract awards, modifications and delivery orders issued by TACOM will be issued electronically. The contractor has the option to receive these actions either via the Worldwide Web (WWW) or Electronic Data Interchange (EDI). Many provisions/clauses that appear "by reference", meaning only clause titles and regulation site are listed; their full texts can be found at the website http://farsite.hill.af.mil/

(b) In order to be eligible to receive an award under this solicitation, the successful offeror must be registered with the Department of Defense (DOD) Central Contractor Registration (CCR). The CCR registration process may be done electronically at the World Wide Web (WWW) site: http://www.ccr.gov/ . (In order to be registered to use EDI, you must use the long form for registration. Certification information, including information on the EDI 838 TPP, must be furnished to the Contracting Officer within 60 calendar days after contract award to complete networking requirements within the Government.)

(c) Worldwide Web Distribution. The contractor will receive an electronic Notice of the Award, Modification, or Delivery Order via e-mail. If you choose the WWW option, you must download the file from the appropriate TACOM webpage:

Warren: http://contracting.tacom.army.mil/awd.htm
Rock Island: https://aais.ria.army.mil/AAIS/AWDINFO/index.htm
Picatinny: http://procnet.pica.army.mil/dbi/DynCBD/award.cfm
Red River Army Depot: http://www.redriver.army.mil/contractingframes/RecentAwards.DPD.cfm
Anniston Army Depot: http://www.anadprocnet.army.mil/

(d) Electronic Data Interchange. If you choose to receive contract awards, modifications and delivery orders through EDI, they will be delivered electronically via the Federal Acquisition Network (FACNET). Federal Standard Version 3050 of Standard X12 from the American National Standards Institute (ANSI) will be used as the format for these electronic transactions.

(1) You must complete the EDI 838 Trading Partner Profile, and must agree (i) to subcontract with a DoD certified VAN or Value Added Service (VAS) provider, or (ii) to become DoD certified as a Value Added Network (VAN). The EDI 838 Training Partner Profile is contained in the basic CCR registration form and includes portions of the registration form which are titled "Optional".

(2) You must select a VAN from the official DoD approved list. DoD Certified VANs are listed at http://www.acq.osd.mil/dpap/ebiz/VANs.htm . If your VAN is later removed from the official list, or if you voluntarily drop your initially selected VAN, then you must switch to a VAN that remains on the official DoD approved list. You must maintain an active account on a DoD approved VAN for the entire duration of the contract, beginning no later than the 60th day after award.

(e) Unless otherwise specified elsewhere in the contract, all data items you are required to provide under this contract must be submitted electronically. Please go to the following webpage for detailed information about submitting your offer electronically:

http://contracting.tacom.army.mil/ebidnotice.htm

(f) Additional information can be obtained by sending a message to: acqcenweb@tacom.army.mil or by calling (586) 574-7059.

[End of Clause]

H-21	52.225-4005 (TACOM)	INVITED CONTRACTOR OR TECHNICAL REPRESENTATIVE STATUS UNDER U.S.-REPUBLIC OF KOREA (ROK) STATUS OF FORCES AGREEMENT (SOFA)	APR/2005

Invited Contractor and TR status shall be governed by the U.S.-ROK Status of Forces Agreement (SOFA) as implemented by USFK Reg 700-19.

a. Invited Contractor or TR status under the SOFA is subject to the written approval of ACofS, Acquisition Management (FKAQ), Unit #15237, APO AP 96205-5237.

b. The Contracting Officer will coordinate with HQ USFK, ACofS, Acquisition Management (FKAQ), IAW FAR 25.8, and USFK Reg 700-19. The AcofS, Acquisition Management will determine the appropriate Contractor status under the SOFA and notify the Contracting Officer of that determination.

c. Subject to the above determination, the Contractor, including its employees and lawful dependents, may be accorded such privileges and exemptions under conditions and limitations as specified in the SOFA and USFK Reg 700-19. These privileges and exemptions may be furnished during the performance period of the contract, subject to their availability and continued SOFA status. Logistic support privileges are provided on an as-available basis to properly authorized individuals.

d. The Contractor warrants and shall ensure that collectively, and individually, its officials and employees performing under this contract will not perform any contract, service, or other business activity in the ROK, except under U.S. Government contracts and that performance is IAW the SOFA.

e. The Contractors direct employment of any Korean-National labor for performance of this contract shall be governed by ROK labor Law and USFK Regulation(s) pertaining to the direct employment and personnel administration of Korean National personnel.

f. The authorities of the ROK have the right to exercise jurisdiction over invited Contractors and Technical Representatives, including Contractor officials, employees and their dependents, for offenses committed in the ROK and punishable by the laws of the ROK. In recognition of the role of such persons in the defense of the ROK, they will be subject to the provisions of Article XXII, SOFA, related Agreed Minutes and Understandings. In those cases in which the authorities of the ROK decide not to exercise jurisdiction, they shall notify the U.S. military authorities as soon as possible. Upon such notification, the military authorities will have the right to exercise jurisdiction as is conferred by the laws of the U.S.

g. Invited Contractors and Technical Representatives agree to cooperate fully with the USFK sponsoring agency and ROK on all matters pertaining to logistic support. In particular, Contractors will provide the assigned sponsoring agency prompt and accurate reports of changes in employee status as required by USFK Reg 700-19.

h. Except for Contractor air crews flying Air Mobility Command missions, all U.S. Contractors performing work on USAF classified contracts will report to the nearest Security Forces Information Security Section for the geographical area where the contract is to be performed to receive information concerning local security requirements.

i. Invited Contractor and Technical Representative status may be withdrawn by USFK/FKAQ upon:

(1) Completion or termination of the contract.

(2) Determination that the Contractor or its employees are engaged in business activities in the ROK other than those pertaining to U.S. Armed Forces.

(3) Determination that the Contractor or its employees are engaged in practices illegal in the ROK or are violating USFK regulations.

j. It is agreed that the withdrawal of invited Contractor or Technical Representative status, or the withdrawal of, or failure to provide any of the privileges associated therewith by the U.S. and USFK, shall not constitute grounds for excusable delay by the Contractor in the performance of the contract and will not justify or excuse the Contractor defaulting in the performance of this contract. Furthermore, it is agreed that withdrawal of SOFA Status for reasons outlined in USFK Reg 700-10, paragraph 2-6a through 2-6c above shall not serve as a basis for the Contractor filing any claims against the U.S. or USFK. Under no circumstance shall the withdrawal of SOFA Status or privileges be considered or construed as a breach of contract by the U.S. or USFK.

[End of Clause]

H-22 52.225-4006 (TACOM) CONTINUANCE OF PERFORMANCE DURING ANY STATE OF EMERGENCY IN THE REPUBLIC OF KOREA (ROK) APR/2005

The Government may direct the Contractor to perform in support of a war, contingency, or exercise, as provided by law or defined by the applicable Service Component Command. Additionally, the Contractor shall be responsible for performing all functions of this contract during any declaration by the U.S. or Korea, of a state of emergency, or during internal strife, rioting, civil disturbances, or perils of any other type until released by the Contracting Officer. Contractor personnel under this contract are considered emergency essential civilians (EEC) unless designated otherwise by the Contracting Officer.

For all EEC personnel, the Contractor shall identify those employees having a U.S. military mobilization recall commitment. The Contractor shall submit to the Contracting Officer adequate plans for replacing those employees IAW DOD Directives 1200.7 and 1352.1. The Contractor is responsible for identifying those Korean Citizen employees having a mobilization or military recall commitment. The Contractor shall submit to the Contracting Officer either Republic of Korea approved exemptions for the identified employees or adequate plans for continuing performance of the contract in the U.S. and/or ROK employees absence.

During time of war, contingency, exercise or crisis, Contractor personnel will remain attached to the headquarters, USFK for management purposes in theater. USFK/FKAQ is the responsible office for all Invited Contractors covered by the U.S. - R.O.K. Status of Forces Agreement. The Contractor shall ensure that all Contractor employees will comply with all guidance, instructions, and general orders applicable to U.S. Armed Forces and DOD civilians and issued by the Theater Commander or his/her representative. This will include any and all guidance and instructions issued based upon the need to ensure mission accomplishment, force protection and safety.

The Contractor shall comply, and shall ensure that all deployed employees and agents comply, with pertinent Department of Army and Department of Defense directives, policies, and procedures, as well as federal statues, judicial interpretations and international agreements (e.g., Status of Forces Agreements, Host Nation Support Agreements, etc.) applicable to U.S. Armed Forces or U.S. citizens in the area of operations. The Contracting Officer will resolve disputes.

The Contractor shall be responsible for providing employees who meet the physical standards and medical requirements for job performance in the designated theater of operations.

The Contracting Officer may direct the Contractor, at the Contractors expense, to remove or replace any Contractor employee failing to adhere to instructions and general orders issued by the Theater Commander or his/her designated representative. The Contractor will replace employees within 72 hours, or as directed by the Contracting Officer, at Contractor expense, if the employee is to be removed or departs an area of operations without permission.

Before deployment, the Contractor shall ensure that each Contractor employee completes a DD Form 93 (Record of Emergency Data Card), and returns the completed form to the Contracting Officers Representative or designated government official.

The Contractor shall report its employees entering and leaving the area of operations IAW theater policies (U.S. Invited Contractors see USFK Reg 700-19) or as directed by the Contracting Officer or his/her designated representative. Additionally, the Contractor shall report its employees in the area of operations by name and by location as required by theater policies.

The Contractor will brief its employees regarding the potential danger, stress, physical hardships and field living conditions. The Contractor will require all its employees to acknowledge in writing that they understand the danger, stress, physical hardships and field living conditions that are possible if the employee deploys in support of military operations.

This clause does not define the obligations for the Government to provide logistic support to the Contractor personnel. Government logistic support to Contractor personnel is not contained within the scope of this contract unless otherwise noted. Government obligations to Contractors during such circumstances are defined in DODI 3020.37 (Continuation of Essential DOD Contractor Services during Crisis); U.S. Forces Korea Regulations, SOFA provisions, Agency Supplements and Regulations.

The Contracting Officer will discern any additional GFE, GFP or supplies necessary to facilitate the performance of the enhanced requirement or necessary for the protection of Contractor personnel. These items will be furnished to the Contractor at the sole discretion of the Contracting Officer.

H-23 52.225-4040 (TACOM) ARMY MATERIEL COMMAND (AMC) ADMINISTRATIVE REQUIREMENTS FOR DEPLOYED CONTRACTORS JUN/2005

(a) In order to maintain accountability of all deployed personnel in the Theater of Operations (see DFARS clause 252.225-7040 for definition), the Contractor shall follow instructions issued by the Army Materiel Commands Logistics Support Element (AMC LSE) or other Contracting Officers designated representative to provide, and keep current, requested data on Contractor Personnel for entry into military personnel database systems.

(b) The Contractor shall coordinate with the AMC LSE or other Contracting Officers designated representative for logistics support, as follows:

(1) Upon initial entry into the Theatre of Operations;

(2) Upon initiation of contract performance;

(3) Upon relocation of contract performance within the Theatre of Operations; and

(4) Upon exiting the Theatre of Operations.

[End of Clause]

H-24 52.245-4000 ACCOUNTABILITY OF ITEMS UNDER OVERHAUL/MAINTENANCE/REPAIR CONTRACTS (TACOM) MAY/2001

The contractor shall, upon receipt of any items specified for overhaul, maintenance or repair, send the following information by email to:

commreppro@tacom.army.mil

This information will account for Government assets during transit and while in the possession of the contractor until they are returned and received by the Government or its representative.

(1) Upon receipt of Government assets, notification must be provided within 5 business days detailing the NSN, document number, quantity, and date of receipt for assets sent to the contractor in support of an overhaul/maintenance/repair program.

(2) A weekly report must be submitted showing how many assets were repaired, how many were scrapped and how many were shipped back to the Government under the overhaul/maintenance/repair program.

(3) All shipping documentation accompanying repaired assets returned to the Government must have the following statement annotated in the remarks portion of the shipping document: "RETURN FROM REPAIR, MARK FOR: (the document number under which the assets were received at the contractor location)." NOTE: The quantity shipped under each document number must not exceed the quantity received under that same document number.

[End of Clause]

H-25 52.246-4026 LOCAL ADDRESSES FOR DD FORM 250 AND WAWF RECEIVING REPORTS (TACOM) SEP/2006

(a) The Contractor may use either the Material Inspection and Receiving Report (DD 250) or Wide Area Workflow (WAWF) to process receiving reports for inspection, acceptance, and payment. Use only one method per contract; not both.

(b) If you are using the Material Inspection and Receiving Report (DD 250), use one of the following methods to send each DD 250 pertaining to this contract to us:

(1) Our first preference is for you to use electronic mail (e-mail), using the following e-mail address: DD250@tacom.army.mil

(2) Our second preference is for you to use data facsimile (datafax) transmission, using this fax number:

(586) 574-7788 and use "DD250 mailbox" in the "to:" block of your fax cover or header sheet.

In either method, do not mix DD250s from more than one contract in a single transmission. That is, you may submit multiple DD250s in a single transmission, but they must all be against the same contract. These copies meet the requirements for the Purchasing Office copy and the Army Inventory Control Manager copy listed in tables 1 and 2 of DFARS Appendix F. The DD250 form may be found, in three different formats, on the World Wide Web at http://www.dtic.mil/whs/directives/infomgt/forms/forminfo/forminfopage2126.html

(c) If you are using Wide Area Workflow (WAWF) instead of DD 250s, we may require copies of the WAWF Receiving Report, Bills of Lading, or other documentation to resolve delinquencies, payment issues, or other administrative issues. If this documentation is requested, use the same email address or fax number shown in paragraph (b) above to submit the information. No copies of the WAWF Receiving Report are required unless specifically requested by the PCO, buyer, or other appropriate government official.

[End of Clause]

H.1 EXCHANGE OF NONEXCESS GOVERNMENT PERSONAL PROPERTY

The exchange of nonexcess bridge bays and related bridging equipment is made under the authority of 40 USC Section 481 (c); 32 CFR 736.5 (e); 41 CFR 101-46.2, 101-46.3 and 41 CFR 102-39.70; DoDI 4140.60; DoDD 4140.1R; FMR 102-39 and GSA authorization letter dated 28 November 2001.

It is mutually agreed by and between the Government and General Dynamics Santa Barbara Sistemas (GDSBS) as follows:

1. GDSBS shall exchange new Improved Ribbon Bridge Interior Bays, NSN 5420-01-470-5824, new Improved Ribbon Bridge Ramp Bays, NSN 5420-01-470-5825 and other associated equipment produced under Tank Automotive & Armaments Command (TACOM) contract W56HZV-05-D-0056, for specified nonexcess bridge bays and related bridging equipment of the United States Army, Program Executive Office, Combat Support & Combat Service Support (PEO CS&CSS) as described hereinafter in paragraph 2.

2. Nonexcess Government provided bridge bay or related bridging equipment for the purposes of this agreement is identified as: Standard ribbon bridge ramp (NSN: 5420-00-497-5276) and interior bays (NSN: 5420-00-071-5322), bailey bridge set (NSN: 5420-00-530-3784), bailey bridge erection set (NSN: 5420-00-530-3785), bailey bridge cable reinforcement set (NSN: 5420-00-421-1301), bailey bridge conversion set (NSN: 5420-00-267-0026), M812 bridge transporter truck (NSN: 5420-00-071-5321), M945 bridge transporter truck (NSN: 5420-01-175-6524) and collateral equipment, Additional Authorized Equipment (AAE), Basic Issue Items (BII) and supplementary sets that are associated with all the noted equipment.

3. The parties agree that this exchange agreement is at no cost to the United States Government. Except for such nonexcess Government bridge bays and related bridging equipment, which will be provided in exchange for new replacement equipment, GDSBS will not be compensated with any money or funds of any kind from the United States Government.

4. GDSBS agrees to and shall accept nonexcess Government bridge bays and related bridging equipment on an AS IS, WHERE IS basis and shall be responsible for all arrangements of transporting such equipment to GDSBS or disposition points. Reasonable costs for disassembly, packing, crating, handling, transportation and other actions as necessary for the movement of such property to GDSBSs location, including such costs, charges and expenses which may be incident to receipt of such property, including the costs of any required demilitarization, refurbishment, reconfiguration, reconditioning and preparation for transportation to GDSBS, shall be deducted from the Exchange Agreement balance received for each item. Upon reasonable advanced notice, the Government agrees to assist GDSBS in gaining access to the locations where the Governments nonexcess property is located.

5. PM-Bridging will receive credit equal to fifty percent (50%) of the net proceeds obtained by GDSBS when they barter the equipment. In the event GDSBS is unsuccessful in bartering this equipment, the Government will accept a minimum scrap value of $2,000 per bay, $500 per bridge set and $1,250 per truck. The Government shall have the right to order new replacement equipment as described in paragraph 1 above from General Dynamics Santa Barbara Sistemas for delivery from its credited allowance for exchanged non-excess equipment at the program year price under Contract W56HZV-05-D-0056 at the time such replacement equipment is ordered. The credit will be retained by GDSBS until the Government orders new equipment.

6. Transfer of ownership of non-excess exchange equipment to General Dynamics Santa Barbara Sistemas shall be made by the Government subject to the following conditions:

a. Approval for export from the Department of State (DOS), Office of Defense Trade Controls, as appropriate.

b. Copies of the Conditions of Agreement, DoS export license(s), GSA approval must be forwarded to the Demilitarization Program Officer, Department of Defense, 8725 John J. Kingman Road, Suite 2533, Ft. Belvoir, VA 22060-6221.

c. Each proposed sale of nonexcess exchange equipment by General Dynamics Santa Barbara Sistemas shall prohibit subsequent redistribution (e.g., donation, transfer, barter, trade, sale, etc.) to other than the stated recipient unless authorized by the DoD Demilitarization Program Office and the DoS.

d. Each proposed sale of nonexcess exchange equipment by General Dynamics Santa Barbara Sistemas shall prohibit any other disposition to other than the stated recipients without performance of demilitarization in accordance with DoD 416.21-M-1.

7. GDSBS shall document and track all nonexcess Government bridge and bridging equipment exchanged by this agreement by serial number, registration number, location, nomenclature, quantity, exchange allowance and other pertinent data through use of a contractor developed and maintained database. The permanent files will be kept for the life of the exchange agreement to ensure all property transactions are auditable and traceable. The Government will be provided access and copies of the complete permanent files and provided electronic reports in contractor format on a monthly and as-needed basis.

8. The trade-in value of each nonexcess Government-provided bridge or related bridging equipment shall be maintained by GDSBS in the permanent database.

H.2 Price Adjustment for Exchange Rate Increase/Decrease

H.2.1 The Government and the Contractor acknowledge that a portion of the price payable to the contractor under option CLINs 2001AA, 2002AA, 3001AA, 3002AA, 4001AA, 4002AA, 5001AA, 5002AA, 6001AA, 6002AA, 7001AA, and 7002AA if exercised by the Government will be subject to potential risks due to the exchange rate fluctuations between the US dollar and the EURO. The price established under the above CLINs shall be upward or downward adjusted if necessary, depending upon whether the net difference in the adjustments calculated

in accordance with the paragraphs below, is a plus or minus figure. Such adjustments shall be set forth in Supplemental Agreements to this contract, which shall include the calculations upon which they are made.

H.2.2 The evaluation of the US dollar to the EURO is the following: One dollar is equal to .7485 EURO. The Base Exchange Rate is 1.3359. The High Band Rate to be used under this contract is 1.3859. The Low Band Rate to be used under this contract is 1.2859. If the Exchange Rate is greater or lower than these two rates, an adjustment to the Unit Price of the CLIN being exercised shall be adjusted using the following Procedure. (The aformentioned XXX's shall be replaced by numbers agreed to prior to signature of this contract and these words shall be removed before that signature.)

The following is the Equation for the New CLIN Unit Price

EQUATION New CLIN Unit Price is equal to Base CLIN Unit Price plus Adjustments in dollars per Unit.

Current (Base exchange rate)

	Equation	Band	Exchange rate	Equation for Adjustment
High Band Rate	(1)	HIGH	amount listed in H.2.2 above(Exchange rate).	Adjustment in dollars per Unit equals the Base CLIN Unit Price times (1 minus the High Band Rate divided by the Actual Rate Higher).
	(2)	WITHIN		Adjustment in dollars per Unit equals zero.
Low Band Rate	(3)	LOW	amount listed in H.2.2 above(Exchange rate).	Adjustment in dollars per Unit equals the Base CLIN Unit Price times (1 minus the Low Band Rate divided by the Actual Rate Lower).

If actual exchange rate is higher than the High Band Rate, then use Equation (1) above

If actual exchange rate is within the band, then use Equation (2) above.

If actual exchange rate is less than the Low Band Rate, then use Equation (3) above

NOTE: Use 4 (four) decimal places for all intermediate operations in the equations above, the number shown by the New York Federal Reserve. Round to zero (0) decimal places (nearest dollar) for the final operation.

For the placement of the Armys FY07 requirements, these paragraphs H.2 thru H.2.4 do not apply.

H.2.3 The prices in CLINs 2001AA, 2002AA, 3001AA, 3002AA, 4001AA, 4002AA, 5001AA, 5002AA, 6001AA, 6002AA, 7001AA, and 7002AA shall be adjusted using the Actual Exchange Rate at time of award of the individual CLIN and the High Band Rate or Low Band Rate listed in H.2.2 above. The actual exchange rate will be established no sooner than five (5) days before the exercise of Option of the CLIN by going to the Federal Reserve Bank of New York to find the Foreign Exchange Rate for the EURO that day at 1000 AM. This shall be the Actual Exchange Rate used in the following formula. If the adjustment falls within the band range listed above, no adjustment to the prices in the above CLINs shall be made. If it falls above or below the band range listed above, adjustments in the price listed in the above CLIN(s) shall be made before exercising that Option.

H.2.4 The following are examples of a Higher Actual Rate and a Lower Actual Rate and its impact on the Unit Price. These examples will use a Unit price of $10,000 under CLIN XXXX to explain the process.

Examples of if the exchange rate is higher or lower.

Equation for the New CLIN Unit Price is as follows:
EQUATION New CLIN Unit Price is equal to Base CLIN Unit Price plus Adjustments in dollars per Unit.

Calculation of new CLIN Unit Price to explain the process:
The Base Exchange Rate is $1.2360

The Unit Price under CLIN XXXX is $10,000.
The High Band Rate is $1.3500 as set in the contract, H.X.2.
The Low Band Rate is $1.1500 as set in the contract, H.X.2.
The Actual Rate Higher is $1.4441 per the New York Federal Reserve just before award of Option.
The Actual Rate Lower is $1.0987 per the New York Federal Reserve just before award of Option.

EQUATION (1)
The Actual Rate Higher of $1.4441 dollars per EURO is higher than the High Band Rate of $1.3500 as set in the contract, H.2.2, so we use equation (1).

$10,000 X (1 1.4441 divided by 1.3500) The new CLIN Unit Price is equal to timesing $10,000 times (Unit Price under CLIN XXXX) by the figure derived from dividing $1.3500 (the High Band Rate per H.2.2) by the $1.4441 (Actual Rate Higher per the New York Federal Reserve) and then taken from the number one (1) and then adding this number to $10,000 to get a new CLIN UNIT Price of $10,652.

$10,000 times 1 minus (1.3500 divided by 1.4441) plus $10,000 equals new CLIN Unit Price
$10,000 times 1 minus .9348 plus $10,000 equals new CLIN Unit Price.
$10,000 times .0652 plus $10,000 equals new CLIN Unit Price.
$652 plus $10,000 equals $10,652, the new CLIN Unit Price

EQUATION (2)
The Actual Rate Higher or Actual Rate Lower is between the High Band Rate and Low Band Rate that is listed in the paragraph above, H.2. No adjustment in the CLIN Unit Price will be made.

EQUATION (3)
The Actual Rate Lower of $1.0987 dollars to EURO, is lower than the Low Band Rate of $1.1500 as set in the contract, H.2.2, so we use equation (3).

($10,000 X (1 1.1500 divided by 1.0987) The new CLIN Unit Price is equal to timesing $10,000 times (Unit Price under CLIN XXXX) by the figure derived from dividing $1.1500 (the Low Band Rate per H.2.2) by the $1.0987 (Actual Rate Lower per the New York Federal Reserve) and then taken from the number one (1) and then adding this number to $10,000 to get a new CLIN UNIT Price of $9,543.

$10,000 times 1 minus (1.1500 divided by 1.0987) plus $10,000 equals new CLIN Unit Price
$10,000 times 1 minus 1.0466 plus $10,000 equals new CLIN Unit Price.
$10,000 times a minus .0466 plus $10,000 equals new CLIN Unit Price.
A minus 466 plus $10,000 equals $9,534 the new CLIN Unit Price

NOTE: Use 4 (four) decimal places for all intermediate operations in the equations above, the number shown by the New York Federal Reserve. Round to zero (0) decimal places (nearest dollar) for the final operation.

H.2.5 Option to Extend the Term of the Contract

(a) The Government may extend the term of the contract (in one year increments) by written notice to the Contractor 60 days prior to the expiration date of the contract.

(b) If the Government exercises this option, the extended contract shall be considered to include this option clause.

(c) The total duration of this contract, including the exercise of any options under this clause, shall not exceed seven years.

First Ordering Year valid until - 12 months after contract award
Second Ordering Year (Option) valid until -24 months after contract award
Third Ordering Year (Option) valid until - 36 months after contract award
Fourth Ordering Year (Option) valid until - 48 months after contract award
Fifth Ordering Year (Option) valid until - 60 months after contract award
Sixth Ordering Year (Option) valid until - 72 months after contract award
Seventh Ordering Year (Option) valid until - 84 months after contract award

*** END OF NARRATIVE H0001 ***

SECTION I - CONTRACT CLAUSES

This contract incorporates one or more clauses by reference, with the same force and effect as if they were given in full text. Upon request, the Contracting Officer will make their full text available. Also, the full text of a clause may be accessed electronically at this address: http://farsite.hill.af.mil/

[End of Clause]

	Regulatory Cite	Title	Date
I-1	52.202-1	DEFINITIONS	JUL/2004
I-2	52.203-3	GRATUITIES	APR/1984
I-3	52.203-5	COVENANT AGAINST CONTINGENT FEES	APR/1984
I-4	52.203-6	RESTRICTIONS ON SUBCONTRACTOR SALES TO THE GOVERNMENT	SEP/2006
I-5	52.203-7	ANTI-KICKBACK PROCEDURES	JUL/1995
I-6	52.203-8	CANCELLATION, RESCISSION AND RECOVERY OF FUNDS FOR ILLEGAL OR IMPROPER ACTIVITY	JAN/1997
I-7	52.203-10	PRICE OR FEE ADJUSTMENT FOR ILLEGAL OR IMPROPER ACTIVITY	JAN/1997
I-8	52.203-12	LIMITATION ON PAYMENTS TO INFLUENCE CERTAIN FEDERAL TRANSACTIONS	SEP/2005
I-9	52.204-4	PRINTING/COPYING DOUBLE-SIDED ON RECYCLED PAPER	AUG/2000
I-10	52.208-9	CONTRACTOR USE OF MANDATORY SOURCES OF SUPPLY OR SERVICES	JUL/2004
I-11	52.209-6	PROTECTING THE GOVERNMENT'S INTEREST WHEN SUBCONTRACTING WITH CONTRACTORS DEBARRED, SUSPENDED, OR PROPOSED FOR DEBARMENT	SEP/2006
I-12	52.211-5	MATERIAL REQUIREMENTS	AUG/2000
I-13	52.211-15	DEFENSE PRIORITY AND ALLOCATION REQUIREMENTS	SEP/1990
I-14	52.215-2	AUDIT AND RECORDS - NEGOTIATIONS	JUN/1999
I-15	52.215-8	ORDER OF PRECEDENCE--UNIFORM CONTRACT FORMAT	OCT/1997
I-16	52.215-10	PRICE REDUCTION FOR DEFECTIVE COST OR PRICING DATA	OCT/1997
I-17	52.215-12	SUBCONTRACTOR COST OR PRICING DATA	OCT/1997
I-18	52.215-14	INTEGRITY OF UNIT PRICES (ALTERNATE I, (OCT 1997))	OCT/1997
I-19	52.215-15	PENSION ADJUSTMENTS AND ASSET REVERSIONS	OCT/2004
I-20	52.215-17	WAIVER OF FACILITIES CAPITAL COST OF MONEY	OCT/1997
I-21	52.215-18	REVERSION OR ADJUSTMENT OF PLANS FOR POSTRETIREMENT BENEFITS (PRB) OTHER THAN PENSIONS	JUL/2005
I-22	52.215-19	NOTIFICATION OF OWNERSHIP CHANGES	OCT/1997
I-23	52.219-8	UTILIZATION OF SMALL BUSINESS CONCERNS	MAY/2004
I-24	52.219-9	SMALL BUSINESS SUBCONTRACTING PLAN (Alternate II dated October 2001)	JUL/2005
I-25	52.219-16	LIQUIDATED DAMAGES - SUBCONTRACTING PLAN	JAN/1999
I-26	52.222-1	NOTICE TO THE GOVERNMENT OF LABOR DISPUTES	FEB/1997
I-27	52.222-19	CHILD LABOR--COOPERATION WITH AUTHORITIES AND REMEDIES	JAN/2006
I-28	52.222-20	WALSH-HEALEY PUBLIC CONTRACTS ACT	DEC/1996
I-29	52.222-21	PROHIBITION OF SEGREGATED FACILITIES	FEB/1999
I-30	52.222-26	EQUAL OPPORTUNITY	MAR/2007
I-31	52.222-29	NOTIFICATION OF VISA DENIAL	JUN/2003
I-32	52.222-35	EQUAL OPPORTUNITY FOR SPECIAL DISABLED VETERANS, VETERANS OF THE VIETNAM ERA, AND OTHER ELIGIBLE VETERANS	SEP/2006
I-33	52.222-36	AFFIRMATIVE ACTION FOR WORKERS WITH DISABILITIES	JUN/1998
I-34	52.222-37	EMPLOYMENT REPORTS ON SPECIAL DISABLED VETERANS, VETERANS OF THE VIETNAM ERA, AND OTHER ELIGIBLE VETERANS	SEP/2006
I-35	52.222-50	COMBATING TRAFFICING IN PERSONS	APR/2006
I-36	52.223-3	HAZARDOUS MATERIAL IDENTIFICATION AND MATERIAL SAFETY DATA	JAN/1997
I-37	52.223-6	DRUG FREE WORKPLACE	MAY/2001
I-38	52.223-14	TOXIC CHEMICAL RELEASE REPORTING	AUG/2003
I-39	52.225-8	DUTY-FREE ENTRY	FEB/2000
I-40	52.225-13	RESTRICTIONS ON CERTAIN FOREIGN PURCHASES	FEB/2006
I-41	52.225-14	INCONSISTENCY BETWEEN ENGLISH VERSION AND TRANSLATION OF CONTRACT	FEB/2000
I-42	52.227-3	PATENT INDEMNITY	APR/1984
I-43	52.228-3	WORKERS' COMPENSATION INSURANCE (DEFENSE BASE ACT)	APR/1984
I-44	52.228-4	WORKERS' COMPENSATION AND WAR-HAZARD INSURANCE OVERSEAS	APR/1984
I-45	52.229-3	FEDERAL, STATE, AND LOCAL TAXES	APR/2003
I-46	52.229-4	FEDERAL, STATE, AND LOCAL TAXES (NONCOMPETITIVE CONTRACT)	APR/2003
I-47	52.229-6	TAXES--FOREIGN FIXED-PRICE CONTRACTS	JAN/1991
I-48	52.229-7	TAXES--FIXED-PRICE CONTRACTS WITH FOREIGN GOVERNMENTS	JAN/1991
I-49	52.230-2	COST ACCOUNTING STANDARDS	APR/1998
I-50	52.230-6	ADMINISTRATION OF COST ACCOUNTING STANDARDS	APR/2005

	Regulatory Cite	Title	Date
I-51	52.232-1	PAYMENTS	APR/1984
I-52	52.232-8	DISCOUNTS FOR PROMPT PAYMENT	FEB/2002
I-53	52.232-9	LIMITATION ON WITHHOLDING OF PAYMENTS	APR/1984
I-54	52.232-11	EXTRAS	APR/1984
I-55	52.232-16	PROGRESS PAYMENTS (Alternate I dated March 2000) (This clause only applies to small businesses.)	APR/2003
I-56	52.232-16	PROGRESS PAYMENTS	APR/2003
I-57	52.232-16	PROGRESS PAYMENTS (Alternate III dated April 2003, does not apply to small businesses)	APR/2003
I-58	52.232-17	INTEREST	JUN/1996
I-59	52.232-25	PROMPT PAYMENT	OCT/2003
I-60	52.232-33	PAYMENT BY ELECTRONIC FUNDS TRANSFER--CENTRAL CONTRACTOR REGISTRATION	OCT/2003
I-61	52.233-3	PROTEST AFTER AWARD	AUG/1996
I-62	52.233-4	APPLICABLE LAW FOR BREACH OF CONTRACT CLAIM	OCT/2004
I-63	52.242-4	CERTIFICATION OF INDIRECT COSTS	JAN/1997
I-64	52.242-13	BANKRUPTCY	JUL/1995
I-65	52.243-1	CHANGES--FIXED-PRICE	AUG/1987
I-66	52.243-7	NOTIFICATION OF CHANGES	APR/1984
I-67	52.244-2	SUBCONTRACTS	AUG/1998
I-68	52.244-5	COMPETITION IN SUBCONTRACTING	DEC/1996
I-69	52.246-24	LIMITATION OF LIABILITY--HIGH-VALUE ITEMS	FEB/1997
I-70	52.247-1	COMMERCIAL BILL OF LADING NOTATIONS	FEB/2006
I-71	52.247-63	PREFERENCE FOR U.S.-FLAG AIR CARRIERS	JUN/2003
I-72	52.247-68	REPORT OF SHIPMENT (REPSHIP)	FEB/2006
I-73	52.248-1	VALUE ENGINEERING	FEB/2000
I-74	52.249-2	TERMINATION FOR CONVENIENCE OF THE GOVERNMENT (FIXED-PRICE)	MAY/2004
I-75	52.249-8	DEFAULT (FIXED-PRICE SUPPLY AND SERVICE)	APR/1984
I-76	52.253-1	COMPUTER GENERATED FORMS	JAN/1991
I-77	252.203-7001	PROHIBITION ON PERSONS CONVICTED OF FRAUD OR OTHER DEFENSE CONTRACT-RELATED FELONIES	DEC/2004
I-78	252.204-7003	CONTROL OF GOVERNMENT PERSONNEL WORK PRODUCT	APR/1992
I-79	252.209-7004	SUBCONTRACTING WITH FIRMS THAT ARE OWNED OR CONTROLLED BY THE GOVERNMENT OF A TERRORIST COUNTRY per DoD interim rule, Federal Register 27 Mar 98	MAR/1998
I-80	252.211-7005	SUBSTITUTIONS FOR MILITARY OR FEDERAL SPECIFICATIONS AND STANDARDS	NOV/2005
I-81	252.215-7000	PRICING ADJUSTMENTS	DEC/1991
I-82	252.215-7002	COST ESTIMATING SYSTEM REQUIREMENTS	OCT/1998
I-83	252.216-7003	ECONOMIC PRICE ADJUSTMENT - WAGE RATES OR MATERIAL PRICES CONTROLLED BY A FOREIGN GOVERNMENT	JUN/1997
I-84	252.219-7003	SMALL, SMALL DISADVANTAGED AND WOMEN-OWNED SMALL BUSINESS SUBCONTRACTING PLAN (DOD CONTRACTS)	APR/1996
I-85	252.225-7012	PREFERENCE FOR CERTAIN DOMESTIC COMMODITIES	JUN/2004
I-86	252.225-7014	PREFERENCE FOR DOMESTIC SPECIALTY METALS	JUN/2005
I-87	252.225-7015	RESTRICTION ON ACQUISITION OF HAND OR MEASURING TOOLS	JUN/2005
I-88	252.225-7016	RESTRICTION ON ACQUISITION OF BALL AND ROLLER BEARINGS	MAR/2006
I-89	252.225-7025	RESTRICTION ON ACQUISITION OF FORGINGS	JUL/2006
I-90	252.225-7031	SECONDARY ARAB BOYCOTT OF ISRAEL	JUN/2005
I-91	252.225-7041	CORRESPONDENCE IN ENGLISH	JUN/1997
I-92	252.225-7042	AUTHORIZATION TO PERFORM	APR/2003
I-93	252.228-7000	REIMBURSEMENT FOR WAR-HAZARD LOSSES	DEC/1991
I-94	252.229-7000	INVOICES EXCLUSIVE OF TAXES OR DUTIES	JUN/1997
I-95	252.229-7002	CUSTOMS EXEMPTIONS (GERMANY)	JUN/1997
I-96	252.232-7004	DOD PROGRESS PAYMENT RATES	OCT/2001
I-97	252.232-7008	ASSIGNMENT OF CLAIMS (OVERSEAS)	JUN/1997
I-98	252.232-7010	LEVIES ON CONTRACT PAYMENTS	SEP/2005
I-99	252.233-7001	CHOICES OF LAW (OVERSEAS)	JUN/1997
I-100	252.242-7003	APPLICATION FOR U.S. GOVERNMENT SHIPPING DOCUMENTATION/INSTRUCTIONS	DEC/1991
I-101	252.243-7001	PRICING OF CONTRACT MODIFICATIONS	DEC/1991
I-102	252.243-7002	REQUESTS FOR EQUITABLE ADJUSTMENT	MAR/1998
I-103	252.244-7000	SUBCONTRACTS FOR COMMERCIAL ITEMS AND COMMERCIAL COMPONENTS (DoD CONTRACTS)	NOV/2005
I-104	252.247-7023	TRANSPORTATION OF SUPPLIES BY SEA	MAY/2002

	Regulatory Cite	Title	Date
I-105	52.216-18	ORDERING	OCT/1995

(a) Any supplies and services to be furnished under this contract shall be ordered by issuance of delivery orders or task orders by the individuals or activities designated in the Schedule. Such orders may be issued from the Date of Contract Award through June 30, 2013.

(b) All delivery orders are subject to the terms and conditions of this contract. In the event of conflict between a delivery order and this contract, the contract shall control.

(c) If mailed, a delivery order or task order is considered issued when the Government deposits the order in the mail. Orders may be issued orally, by facsimile, or by electronic commerce methods only if authorized in the Schedule.

[End of Clause]

I-106	52.216-19	ORDER LIMITATIONS	OCT/1995

(a) Minimum order. When the Government requires supplies or services covered by this contract in an amount of less than one (1), the Government is not obligated to purchase, nor is the Contractor obligated to furnish, those supplies or services under the contract.

(b) Maximum order. The Contractor is not obligated to honor--

(1) Any order for a single item in excess of 216 Interior Bays amd 72 Ramp Bays.

(2) Any order for a combination of items in excess of 288; or

(3) A series of orders from the same ordering office within 30 days that together call for quantities exceeding the limitation in subparagraph (1) or (2) of this section.

(c) If this is a requirements contract (i.e., includes the REQUIREMENTS clause at subsection 52.216-21 of the Federal Acquisition Regulation (FAR)), the Government is not required to order a part of any one requirement from the Contractor if that requirement exceeds the maximum-order limitations in paragraph (b) of this section.

(d) Notwithstanding paragraphs (b) and (c) of this section, the Contractor shall honor any order exceeding the maximum order limitations in paragraph (b), unless that order (or orders) is returned to the ordering office within 10 days after issuance, with written notice stating the Contractor's intent not to ship the item (or items) called for and the reasons. Upon receiving this notice, the Government may acquire the supplies or services from another source.

[End of Clause]

I-107	52.216-21	REQUIREMENTS	OCT/1995

(a) This is a requirements contract for the supplies or services specified, and effective for the period stated, in the Schedule. The quantities of supplies or services specified in the Schedule are estimates only and are not purchased by this contract. Except as this contract may otherwise provide, if the Government's requirements do not result in orders in the quantities described as estimated or maximum in the Schedule, that fact shall not constitute the basis for an equitable price adjustment.

(b) Delivery or performance shall be made only as authorized by orders issued in accordance with the ORDERING clause. Subject to any limitations in the ORDER LIMITATIONS clause or elsewhere in this contract, the Contractor shall furnish to the Government all supplies or services specified in the Schedule and called for by orders issued in accordance with the ORDERING clause. The Government may issue orders requiring delivery to multiple destinations or performance at multiple locations.

(c) Except as this contract otherwise provides, the Government shall order from the Contractor all the supplies or services specified in the Schedule that are required to be purchased by the Government activity or activities specified in the Schedule.

(d) The Government is not required to purchase from the Contractor requirements in excess of any limit on total orders under this contract.

(e) If the Government urgently requires delivery of any quantity of an item before the earliest date that delivery may be specified under this contract, and if the Contractor will not accept an order providing for the accelerated delivery, the Government may acquire the urgently required goods or services from another source.

(f) Any order issued during the effective period of this contract and not completed within that period shall be completed by the Contractor within the time specified in the order. The contract shall govern the Contractor's and the Government's rights and obligations with respect to that order to the same extent as if the order were completed during the contract's effective period; provided, that the Contractor shall not be required to make any deliveries under this contract after Dec. 31, 2014.

(End of clause)

I-108 52.204-7 CENTRAL CONTRACTOR REGISTRATION JUL/2006

(a) Definitions. As used in this clause--

"Central Contractor Registration (CCR) database" means the primary Government repository for contractor information required for the conduct of business with the Government.

"Commercial and Government Entity (CAGE) code" means-

(1) A code assigned by the Defense Logistics Information Service (DLIS) to identify a commercial or Government entity; or

(2) A code assigned by a member of the North Atlantic Treaty Organization that DLIS records and maintains in the CAGE master file. This type of code is known as an "NCAGE code."

"Data Universal Numbering System (DUNS) number" means the 9-digit number assigned by Dun and Bradstreet, Inc. (D&B) to identify unique business entities.

"Data Universal Numbering System +4 (DUNS+4) number" means the DUNS number assigned by D&B plus a 4-character suffix that may be assigned by a business concern. (D&B has no affiliation with this 4-character suffix.) This 4-character suffix may be assigned at the discretion of the business concern to establish additional CCR records for identifying alternative Electronic Funds Transfer (EFT) accounts (see Subpart 32.11 of the Federal Acquisition Regulation) for the same parent concern.

"Registered in the CCR database" means that-

(1) The Contractor has entered all mandatory information, including the DUNS number or the DUNS+4 number, into the CCR database;

(2) The Government has validated all mandatory data fields, to include validation of the Taxpayer Identification Number (TIN) with the Internal Revenue Service (IRS), and has marked the record ``Active''. The Contractor will be required to provide consent for TIN validation to the Government as a part of the CCR registration process.

(b)

(1) By submission of an offer, the offeror acknowledges the requirement that a prospective awardee shall be registered in the CCR database prior to award, during performance, and through final payment of any contract, basic agreement, basic ordering agreement, or blanket purchasing agreement resulting from this solicitation.

(2) The offeror shall enter, in the block with its name and address on the cover page of its offer, the annotation DUNS or DUNS+4 followed by the DUNS or DUNS+4 number that identifies the offerors name and address exactly as stated in the offer. The DUNS number will be used by the Contracting Officer to verify that the offeror is registered in the CCR database.

(c) If the offeror does not have a DUNS number, it should contact Dun and Bradstreet directly to obtain one.

(1) An offeror may obtain a DUNS number

(i) If located within the United States, by calling Dun and Bradstreet at 1-866-705-5711 or via the Internet at http://www.dnb.com/ ; or

(ii) If located outside the United States, by contacting the local Dun and Bradstreet office.

(2) The offeror should be prepared to provide the following information:

(i) Company legal business name.

(ii) Tradestyle, doing business, or other name by which your entity is commonly recognized.

(iii) Company physical street address, city, state and Zip Code.

(iv) Company mailing address, city, state and Zip Code (if separate from physical).

(v) Company telephone number.

(vi) Date the company was started.

(vii) Number of employees at your location.

(viii) Chief executive officer/key manager.

(ix) Line of business (industry).

(x) Company Headquarters name and address (reporting relationship within your entity).

(d) If the Offeror does not become registered in the CCR database in the time prescribed by the Contracting Officer, the Contracting Officer will proceed to award to the next otherwise successful registered Offeror.

(e) Processing time, which normally takes 48 hours, should be taken into consideration when registering. Offerors who are not registered should consider applying for registration immediately upon receipt of this solicitation.

(f) The Contractor is responsible for the accuracy and completeness of the data within the CCR database, and for any liability resulting from the Governments reliance on inaccurate or incomplete data. To remain registered in the CCR database after the initial registration, the Contractor is required to review and update on an annual basis from the date of initial registration or subsequent updates its information in the CCR database to ensure it is current, accurate and complete. Updating information in the CCR does not alter the terms and conditions of this contract and is not a substitute for a properly executed contractual document.

(1)

(i) If a Contractor has legally changed its business name, doing business as name, or division name (whichever is shown on the contract), or has transferred the assets used in performing the contract, but has not completed the necessary requirements regarding novation and change-of-name agreements in Subpart 42.12, the Contractor shall provide the responsible Contracting Officer a minimum of one business days written notification of its intention to:

(A) Change the name in the CCR database;

(B) Comply with the requirements of Subpart 42.12 of the FAR;

(C) Agree in writing to the timeline and procedures specified by the responsible Contracting Officer. The Contractor must provide with the notification sufficient documentation to support the legally changed name.

(ii) If the Contractor fails to comply with the requirements of paragraph (g)(1)(i) of this clause, or fails to perform the agreement at paragraph (g)(1)(i)(C) of this clause, and, in the absence of a properly executed novation or change-of-name agreement, the CCR information that shows the Contractor to be other than the Contractor indicated in the contract will be considered to be incorrect information within the meaning of the Suspension of Payment paragraph of the electronic funds transfer (EFT) clause of this contract.

(2) The Contractor shall not change the name or address for EFT payments or manual payments, as appropriate, in the CCR record to reflect an assignee for the purpose of assignment of claims (see FAR Subpart 32.8, Assignment of Claims). Assignees shall be separately registered in the CCR database. Information provided to the Contractors CCR record that indicates payments, including those made by EFT, to an ultimate recipient other than that Contractor will be considered to be incorrect information within the meaning of the Suspension of payment paragraph of the EFT clause of this contract.

(g) Offerors and Contractors may obtain information on registration and annual confirmation requirements via the Internet at http://www.ccr.gov/ or by calling 1-888-227-2423, or 269-961-5757.

[End of Clause]

I-109	52.222-39	NOTIFICATION OF EMPLOYEE RIGHTS CONCERNING PAYMENT OF UNION DUES OR FEES	DEC/2004

(a) Definition. As used in this clause--

United States means the 50 States, the District of Columbia, Puerto Rico, the Northern Mariana Islands, American Samoa, Guam, the U.S. Virgin Islands, and Wake Island.

(b) Except as provided in paragraph (e) of this clause, during the term of this contract, the Contractor shall post a notice, in the form of a poster, informing employees of their rights concerning union membership and payment of union dues and fees, in conspicuous places in and about all its plants and offices, including all places where notices to employees are customarily posted. The notice shall include the following information (except that the information pertaining to National Labor Relations Board shall not be included in notices posted in the plants or offices of carriers subject to the Railway Labor Act, as amended (45 U.S.C. 151-188)).

Notice to Employees

Under Federal law, employees cannot be required to join a union or maintain membership in a union in order to retain their jobs. Under certain conditions, the law permits a union and an employer to enter into a union-security agreement requiring employees to pay uniform periodic dues and initiation fees. However, employees who are not union members can object to the use of their payments for certain purposes and can only be required to pay their share of union costs relating to collective bargaining, contract administration, and grievance adjustment.

If you do not want to pay that portion of dues or fees used to support activities not related to collective bargaining, contract administration, or grievance adjustment, you are entitled to an appropriate reduction in your payment. If you believe that you have been required to pay dues or fees used in part to support activities not related to collective bargaining, contract administration, or grievance adjustment, you may be entitled to a refund and to an appropriate reduction in future payments.

For further information concerning your rights, you may wish to contact the National Labor Relations Board (NLRB) either at one of its Regional offices or at the following address or toll free number:

National Labor Relations Board
Division of Information
1099 14th Street, N.W.
Washington, DC 20570
1-866-667-6572
1-866-316-6572 (TTY)

To locate the nearest NLRB office, see NLRB's website at http://www.nlrb.gov .

(c) The Contractor shall comply with all provisions of Executive Order 13201 of February 17, 2001, and related implementing regulations at 29 CFR part 470, and orders of the Secretary of Labor.

(d) In the event that the Contractor does not comply with any of the requirements set forth in paragraphs (b), (c), or (g), the Secretary may direct that this contract be cancelled, terminated, or suspended in whole or in part, and declare the Contractor ineligible for further Government contracts in accordance with procedures at 29 CFR part 470, Subpart B--Compliance Evaluations, Complaint Investigations and Enforcement Procedures. Such other sanctions or remedies may be imposed as are provided by 29 CFR part 470, which implements Executive Order 13201, or as are otherwise provided by law.

(e) The requirement to post the employee notice in paragraph (b) does not apply to--

(1) Contractors and subcontractors that employ fewer than 15 persons;

(2) Contractor establishments or construction work sites where no union has been formally recognized by the Contractor or certified as the exclusive bargaining representative of the Contractor's employees;

(3) Contractor establishments or construction work sites located in a jurisdiction named in the definition of the United States in which the law of that jurisdiction forbids enforcement of union-security agreements;

(4) Contractor facilities where upon the written request of the Contractor, the Department of Labor Deputy Assistant Secretary for Labor-Management Programs has waived the posting requirements with respect to any of the Contractor's facilities if the Deputy Assistant Secretary finds that the Contractor has demonstrated that--

(i) The facility is in all respects separate and distinct from activities of the Contractor related to the performance of a contract; and

(ii) Such a waiver will not interfere with or impede the effectuation of the Executive order; or

(5) Work outside the United States that does not involve the recruitment or employment of workers within the United States.

(f) The Department of Labor publishes the official employee notice in two variations; one for contractors covered by the Railway

Labor Act and a second for all other contractors. The Contractor shall--

(1) Obtain the required employee notice poster from the Division of Interpretations and Standards, Office of Labor-Management Standards, U.S. Department of Labor, 200 Constitution Avenue, NW, Room N-5605, Washington, DC 20210, or from any field office of the Department's Office of Labor-Management Standards or Office of Federal Contract Compliance Programs;

(2) Download a copy of the poster from the Office of Labor-Management Standards website at http://www.olms.dol.gov; or

(3) Reproduce and use exact duplicate copies of the Department of Labor's official poster.

(g) The Contractor shall include the substance of this clause in every subcontract or purchase order that exceeds the simplified acquisition threshold, entered into in connection with this contract, unless exempted by the Department of Labor Deputy Assistant Secretary for Labor-Management Programs on account of special circumstances in the national interest under authority of 29 CFR 470.3(c). For indefinite quantity subcontracts, the Contractor shall include the substance of this clause if the value of orders in any calendar year of the subcontract is expected to exceed the simplified acquisition threshold. Pursuant to 29 CFR part 470, Subpart B--Compliance Evaluations, Complaint Investigations and Enforcement Procedures, the Secretary of Labor may direct the Contractor to take such action in the enforcement of these regulations, including the imposition of sanctions for noncompliance with respect to any such subcontract or purchase order. If the Contractor becomes involved in litigation with a subcontractor or vendor, or is threatened with such involvement, as a result of such direction, the Contractor may request the United States, through the Secretary of Labor, to enter into such litigation to protect the interests of the United States.

[End of Clause]

I-110 52.223-11 OZONE-DEPLETING SUBSTANCES MAY/2001

(a) Definition. Ozone-depleting substance, as used in this clause, means any substance the Evironnmental Protection Agency designates in 40 CFR part 82 as--

(1) Class I, including, but not limited to, chlorofluorocarbons, halons, carbon tetrachloride, and methyl chloroform; or

(2) Class II, including but not limited to, hydrochlorofluorocarbons.

(b) The Contractor shall label products which contain or are manufactured with ozone-depleting substances in the manner and to the extent required by 42 U.S.C. 7671j(b), (c), and (d) and 40 CFR Part 82, Subpart E, as follows:

WARNING: Contains (or manufactured with, if applicable) ____n/a_____ * _____, a substance(s) which harm(s) public health and environment by destroying ozone in the upper atmosphere.

*The Contractor shall insert the name of the substance(s).

[End of Clause]

I-111 52.244-6 SUBCONTRACTS FOR COMMERCIAL ITEMS SEP/2006

(a) Definitions. As used in this clause--

(1) "Commercial item" has the meaning contained in Federal Acquisition Regulation 2.101, Definitions.

(2) "Subcontract," as used in this clause, includes a transfer of commercial items between divisions, subsidiaries, or affiliates of the Contractor or subcontractor at any tier.

(b) To the maximum extent practicable, the Contractor shall incorporate, and require its subcontractors at all tiers to incorporate, commercial items or nondevelopmental items as components of items to be supplied under this contract.

(c)

(1) The contractor shall insert the following clauses in subcontracts for commercial items:

(i) 52.219-8, Utilization of Small Business Concerns (May 2004)(15U.S.C. 637(d)(2) and (3)), in all subcontracts that offer subcontracting opportunities. If the subcontract (except subcontracts to small business concerns) exceeds $550,000 ($1,ooo,ooo for contruction of any public facility), the subcontractor must include 52.219-8 in lower tier subcontracts that offer subcontracting opportunities.

(ii) 52.222-26, Equal Opportunity (MAR 2007)(E.O. 11246);

(iii) 52.222-35, Equal Opportunity for Special Disabled Veterans, Veterans of the Vietnam Era, and Other Eligible Veterans (SEP 2006) (38 U.S.C. 4212(a));

(iv) 52.222-36, Affirmative Action for Workers with Disabilities (JUN 1998)(29 U.S.C. 793);

(v) 52.222-39, Notification of Employee Rights Concerning Payment of Union Dues or Fees (DEC 2004) (E.O. 13201). Flow down as required in accordance with paragraph (g) of FAR clause 52.222-39).

(vi) 52.247-64, Preference for Privately Owned U.S.-Flag Commercial Vessels (FEB 2006) (46 U.S.C. Appx 1241 and 10 U.S.C. 2631) (flow down required in accordance with paragraph (d) of FAR clause 52.247-64).

(2) While not required, the Contractor may flow down to subcontracts for commercial items a minimum number of additional clauses necessary to satisfy its contractual obligations.

(d) The Contractor shall include the terms of this clause, including this paragraph (d), in subcontracts awarded under this contract.

I-112 52.252-6 AUTHORIZED DEVIATIONS IN CLAUSES APR/1984

(a) The use in this solicitation or contract of any Federal Acquisition Regulation (48 CFR Chapter 1) clause with an authorized deviation is indicated by the addition of (DEVIATION) after the date of the clause.

(b) The use in this solicitation or contract of any DoD FAR Supplement (DFARS) (48 CFR 2) clause with an authorized deviation is indicated by the addition of (DEVIATION) after the name of the regulation.

[End of Clause]

I-113 252.223-7001 HAZARD WARNING LABELS DEC/1991

(a) Hazardous material, as used in this clause, is defined in the Hazardous Material Identification and Material Safety Data clause of this contract.

(b) The Contractor shall label the item package (unit container) of any hazardous material to be delivered under this contract in accordance with the Hazard Communication Standard (29 CFR 1910.1200 et seq). The Standard requires that the hazard warning label conform to the requirements of the standard unless the material is otherwise subject to the labelling requirements of one of the following statutes:

(1) Federal Insecticide, Fungicide and Rodenticide Act;

(2) Federal Food, Drug and Cosmetics Act;

(3) Consumer Product Safety Act;

(4) Federal Hazardous Substances Act; or

(5) Federal Alcohol Administration Act.

(c) The Offeror shall list which hazardous material listed in the Hazardous Material Identification and Material Safety Data clause of this contract will be labelled in accordance with one of the Acts in paragraphs (b)(1) through (5) of this clause instead of the Hazard Communication Standard. Any hazardous material not listed will be interpreted to mean that a label is required in accordance with the Hazard Communication Standard.

MATERIAL (If None, Insert None.)	ACT
None	

(d) The apparently successful Offeror agrees to submit, before award, a copy of the hazard warning label for all hazardous materials not listed in paragraph (c) of this clause. The Offeror shall submit the label with the Material Safety Data Sheet being furnished under the Hazardous Material Identification and Material Safety Data clause of this contract.

(e) The Contractor shall also comply with MIL-STD-129, Marking for Shipment and Storage (including revisions adopted during the term of this contract).

[End of Clause]

I-114 252.229-7001 TAX RELIEF JUN/1997

(a) Prices set forth in this contract are exclusive of all taxes and duties from which the United States Government is exempt by virtue of tax agreements between the United States Government and the Contractor's government. The following taxes or duties have been excluded from the contract price:

NAME OF TAX: (Offeror insert) RATE (PERCENTAGE): (Offeror insert)

(b) The Contractor's invoice shall list separately the gross price, amount of tax deducted, and net price charged.

(c) When items manufactured to United States Government specifications are being acquired, the Contractor shall identify the materials or components intended to be imported in order to ensure that relief from import duties is obtained. If the Contractor intends to use imported products from inventories on hand, the price of which includes a factor for import duties, the Contractor shall ensure the United States Government's exemption from these taxes. The Contractor may obtain a refund of the import duties from its government or request the duty-free import of an amount of supplies or components corresponding to that used from inventory for this contract.

[End of Clause]

I-115 252.229-7001 TAX RELIEF -- ALTERNATE I JUN/1997

(a) Prices set forth in this contract are exclusive of all taxes and duties from which the United States Government is exempt by virtue of tax agreements between the United States Government and the Contractor's government. The following taxes or duties have been excluded from the contract price:

NAME OF TAX: (Offeror insert) RATE (PERCENTAGE): (Offeror insert)

(b) The Contractor's invoice shall list separately the gross price, amount of tax deducted, and net price charged.

(c) When items manufactured to United States Government specifications are being acquired, the Contractor shall identify the materials or components intended to be imported in order to ensure that relief from import duties is obtained. If the Contractor intends to use imported products from inventories on hand, the price of which includes a factor for import duties, the Contractor shall ensure the United States Government's exemption from these taxes. The Contractor may obtain a refund of the import duties from its government or request the duty-free import of an amount of supplies or components corresponding to that used from inventory for this contract.

(d) Tax relief will be claimed in Germany pursuant to the provisions of the Agreement Between the United States of American and Germany Concerning Tax Relief to be Accorded by Germany to United States Expenditures in the Interest of Common Defense. The Contractor shall use Abwicklungsschein fuer abgabenbeguenstigte Lieferungen/Leistungen nach dem Offshore Steuerabkommen (Performance Certificate for Tax-Free Deliveries/Performance according to the Offshore Tax Relief Agreement) or other documentary evidence acceptable to the German tax authorities. All purchases made and paid for on a tax-free basis during a 30-day period may be accumulated, totaled, and reported as tax-free.

[End of Clause]

I-116 52.204-4009 MANDATORY USE OF CONTRACTOR TO GOVERNMENT ELECTRONIC COMMUNICATION (TACOM) MAR/2005

(a) All references in the contract to the submission of written documentation shall mean electronic submission. All electronic submissions shall be in the formats and media described in the website: http://contracting.tacom.army.mil/ebidnotice.htm

(b) This shall include all written unclassified communications between the Government and the Contractor except contract awards

and contract modifications which shall be posted on the internet. Return receipt shall be used if a commercial application is available. Classified information shall be handled in full accordance with the appropriate security requirements.

(c) In order to be contractually binding, all Government communications requiring a Contracting Officer signature must be sent from the Contracting Officer's e-mail address. The Contractor shall designate the personnel with signature authority who can contractually bind the contractor. All binding contractor communication shall be sent from this contractor e-mail address(es).

(d) Upon award, the Contractor shall provide the Contracting Officer with a list of e-mail addresses for all administrative and technical personnel assigned to this contract.

(e) Unless exempted by the Procuring Contracting Officer in writing, all unclassified written communication after contract award shall be transmitted electronically.

[End of Clause]

I-117 52.216-4021 (TACOM) REQUIREMENTS DEFINITION JUN/2005

"Supplies" as used in FAR 52.216-21, entitled Requirements, is hereby defined as new supplies. It does not include rebuilt or remanufactured items.

[End of Clause]

I-118 52.219-4070 PILOT MENTOR-PROTEGE PROGRAM APR/2006

(a) The Pilot Mentor-Protege Program does not apply to small business concerns.

(b) Utilization of the Pilot Mentor-Protege Program (hereafter referred to as the Program) is encouraged. Under the Program, eligible companies approved as mentor firms enter into a mentor-protege agreement with eligible protege firms. The goal of the program is to provide appropriate developmental assistance to enhance the capabilities of the protege firm. The Mentor firm may be eligible for cost reimbursement or credit against their applicable subcontracting goals.

(c) Mentor firms are encouraged to identify and select concerns that are defined as emerging small business concerns, small disadvantaged business, women-owned small business, HUBZone small business, service-disabled veteran-owned small business, veteran-owned small business or an eligible entity employing the severely disabled.

(d) Full details of the program are located at http://www.acq.osd.mil/sadbu/mentor protege/, http://sellingtoarmy.info/, DFARS Appendix I, and DFARS Subpart 219.71, "Pilot Mentor-Protege Program."

(e) For additional questions after reviewing the information provided, contact the Office of Small Business Programs serving your area.

[End of Clause]

Name of Offeror or Contractor: GENERAL DYNAMICS SANTA BARBARA SISTEMAS GMBH

SECTION J - LIST OF ATTACHMENTS

List of Addenda	Title	Date	Number of Pages	Transmitted By
Exhibit A	CONTRACT DATA REQUIREMENTS LIST	10-JUL-2006	010	DATA
Attachment 0001	ATPD 2277, DATED 10 JULY 2006, IMPROVED BRIDGE, FLOATING RIBBON, INTERIOR BAY AND RAMP BAY	10-JUL-2006	015	DATA
Attachment 0002	GRAPHIC REPRESENTATION OF THE IUID PLATES, REF. C.17.2	10-JUL-2006	001	ELECTRONIC IMAGE
Attachment 0003	PROJECTED IRB FIELDING SCHEDULE FOR THE IRB THRU FY11, REF. C.6.5	10-JUL-2006	001	DATA
Attachment 0004	GOVERNMENT CONFIGURATION MANAGEMENT PLAN REF. C.4.3.3.1	31-DEC-2002	001	DATA
Attachment 0005	LISTING OF PARTS UNDER CLIN 1013AA	10-JUL-2006	002	DATA

Exhibit A

Contract Data Requirements List, DD Form 1423
and Data Item Description, DD Form 1564

See the following DD 1423s and DD 1664s for requirements under this Contract W56HZV-XX-X-XXXX

CONTRACT DATA REQUIREMENTS LIST Form Approval OMB No. 0704-0188

Public reporting burden for this collection of information is estimated to average 110 hours per response, including the time for reviewing instructions, searching existing data sources, gathering and maintaining the data needed, and completing and reviewing the collection of information. Send comments regarding this burden estimate or any other aspect of this collection of information, including suggestions for reducing this burden, to Department of Defense, Washington Headquarters Services, Directorate for Information Operations and Reports, 1215 Jefferson Davis Highway, Suite 1204, Arlington, VA 22202-4302, and to the Office of Management and Budget, Paperwork Reduction Project (0704-0188), Washington, DC 20503. Please DO NOT RETURN your form to either these addresses. Send completed form to the Government Issuing Contracting Officer for the Contract/PR No. listed in Block E.

A. CONTRACT LINE ITEM NO.:
B. EXHIBIT: A
C. CATEGORY:
D. SYSTEM/ITEM: IMPROVED RIBBON BRIDGE
E. CONTRACT/PR NO.: W56HZV-XX-X-XXXX
F. CONTRACTOR: GENERAL DYNAMICS SANTA BARBARA SISTEMAS (GDSBS)

1. DATA ITEM NO. A001
2. TITLE OF DATA ITEM: FACAR
3. SUBTITLE:
4. AUTHORITY (Date of Acquisition Document No.) DI-RELI-81315
5. CONTRACT REFERENCE: C.3.2.5
6. REQUIRING OFFICE: SFAE-CSS-FP-E
7. DD250 REQ: N
8. APP CODE:
9. DIST. STATEMENT REQUIRED: 1
10. FREQUENCY: SEE BLK 16
11. AS OF DATE: SEE BLK 16
12. DATE OF FIRST SUB: SEE BLK 16
13. DATE OF SUBS. SUB: SEE BLK 16
14. DISTRIBUTION

A. ADDRESSEES	B. COPIES	DRAFT	FINAL	
			Reg	Repro
SFAE-CSS-FP-E			1	
15. TOTAL:		X	1	X

16. REMARKS:

10, 11, 12, and 13: FACAR 30 days after receipt of each Product Quality Deficiency Report (PQDR)

Electronic copy delivery to Email as follows: SFAE-CSS-FP-E, keith.d.powell@us.army.mil
Further distribution within TACOM will be made by SFAE-CSS-FP-E.

17. PRICE GROUP:
18. ESTIMATED TOTAL PRICE:
G. PREPARED BY: Michael Herlevi H. DATE: 10 JUL 06
I. APPROVED BY: keith.d.powell J. DATE: 10 JUL 06

DD FORM 1423-E, MAY 99

A. CONTRACT LINE ITEM NO.:
B. EXHIBIT: A
C. CATEGORY:
D. SYSTEM/ITEM: IMPROVED RIBBON BRIDGE
E. CONTRACT/PR NO.: W56HZV-XX-X-XXXX
F. CONTRACTOR: GENERAL DYNAMICS SANTA BARBARA SISTEMAS (GDSBS)

1. DATA ITEM NO. A002
2. TITLE OF DATA ITEM: Final Inspection Record
3. SUBTITLE:
4. AUTHORITY (Date of Acquisition Document No.) DI-QCIC-81068
5. CONTRACT REFERENCE: C.3.3
6. REQUIRING OFFICE: SFAE-CSS-FP-E
7. DD250 REQ: N
8. APP CODE:
9. DIST. STATEMENT REQUIRED: 1
10. FREQUENCY: AS REQ
11. AS OF DATE: SEE BLK 16
12. DATE OF FIRST SUB: 60 DAC
13. DATE OF SUBS. SUB: SEE BLK 16
14. DISTRIBUTION

A. ADDRESSEES	B. COPIES	DRAFT	FINAL	
			Reg	Repro
SFAE-CSS-FP-E		1	1	
15. TOTAL:		1	1	X

16. REMARKS:

Delete 10.2 of the DID and use the format and content as of the previous contract.
11. 30 day Government review and approval.
13. Updates as required per process changes. The acceptance point for the first FIR update is at Destination. Any following updates to the FIR will be accepted by the QAR at Origin.

Electronic copy delivery to Email as follows: SFAE-CSS-FP-E, keith.d.powell@us.army.mil
Further distribution within TACOM will be made by SFAE-CSS-FP-E.

17. PRICE GROUP:
18. ESTIMATED TOTAL PRICE:
G. PREPARED BY: Michael Herlevi H. DATE: 10 JUL 06
I. APPROVED BY: keith.d.powell J. DATE: 10 JUL 06

DD FORM 1423-E, MAY 99

A. CONTRACT LINE ITEM NO.:
B. EXHIBIT: A
C. CATEGORY:
D. SYSTEM/ITEM: IMPROVED RIBBON BRIDGE
E. CONTRACT/PR NO.: W56HZV-XX-X-XXXX
F. CONTRACTOR: GENERAL DYNAMICS SANTA BARBARA SISTEMAS (GDSBS)

1. DATA ITEM NO. A003
2. TITLE OF DATA ITEM: Engineering Change Proposal (ECP)
3. SUBTITLE:
4. AUTHORITY (Date of Acquisition Document No.) DI-CMAN-81589
5. CONTRACT REFERENCE: C.4.3.3.1 and C.4.3.4.1
6. REQUIRING OFFICE: SFAE-CSS-FP-E
7. DD250 REQ: N
8. APP CODE:
9. DIST. STATEMENT REQUIRED:
10. FREQUENCY: SEE BLK 16
11. AS OF DATE: SEE BLK 16
12. DATE OF FIRST SUB: SEE BLK 16
13. DATE OF SUBS. SUB: SEE BLK 16

14. DISTRIBUTION	A. ADDRESSEES	B. COPIES	DRAFT	FINAL	
				Reg	Repro
	SFAE-CSS-FP-E		1	1	
15. TOTAL:			1	1	X

16. REMARKS:

ECPs shall be numbered sequentially from Contract DAAE07-00-C-L032.

Electronic copy delivery to Email as follows: SFAE-CSS-FP-E, keith.d.powell@us.army.mil
Further distribution within TACOM will be made by SFAE-CSS-FP-E.

17. PRICE GROUP:
18. ESTIMATED TOTAL PRICE:
G. PREPARED BY: Michael Herlevi H. DATE: 10 JUL 06
I. APPROVED BY: keith.d.powell J. DATE: 10 JUL 06

DD FORM 1423-E, MAY 99

A. CONTRACT LINE ITEM NO.:
B. EXHIBIT: A
C. CATEGORY:
D. SYSTEM/ITEM: IMPROVED RIBBON BRIDGE
E. CONTRACT/PR NO.: W56HZV-XX-X-XXXX
F. CONTRACTOR: GENERAL DYNAMICS SANTA BARBARA SISTEMAS (GDSBS)

1. DATA ITEM NO. A004
2. TITLE OF DATA ITEM: Request for Deviation (RFD)
3. SUBTITLE:
4. AUTHORITY (Date of Acquisition Document No.) DI-CMAN-80640C
5. CONTRACT REFERENCE: C.4.3.8.2
6. REQUIRING OFFICE: SFAE-CSS-FP-E
7. DD250 REQ:
8. APP CODE:
9. DIST. STATEMENT REQUIRED:
10. FREQUENCY: AS REQ
11. AS OF DATE: AS REQ
12. DATE OF FIRST SUB: AS REQ
13. DATE OF SUBS. SUB: AS REQ

14. DISTRIBUTION	A. ADDRESSEES	B. COPIES	DRAFT	FINAL	
				Reg	Repro
	SFAE-CSS-FP-E			1	
15. TOTAL:			X	1	X

16. REMARKS:

Electronic copy delivery to Email as follows: SFAE-CSS-FP-E, keith.d.powell@us.army.mil
Further distribution within TACOM will be made by SFAE-CSS-FP-E.

17. PRICE GROUP:
18. ESTIMATED TOTAL PRICE:
G. PREPARED BY: Michael Herlevi H. DATE: 10 JUL 06
I. APPROVED BY: keith.d.powell J. DATE: 10 JUL 06

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A. CONTRACT LINE ITEM NO.:
B. EXHIBIT: A
C. CATEGORY:
D. SYSTEM/ITEM: IMPROVED RIBBON BRIDGE
E. CONTRACT/PR NO.: W56HZV-XX-X-XXXX
F. CONTRACTOR: GENERAL DYNAMICS SANTA BARBARA SISTEMAS (GDSBS)

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1. DATA ITEM NO. A009
2. TITLE OF DATA ITEM: Logistics Management Information
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ATTACHMENT 001

Performance Based Purchase Description
IMPROVED BRIDGE, FLOATING: RIBBON, INTERIOR BAY AND RAMP BAY
ATPD-2277, DATED 10 JULY 2006

1. Scope

1.1 ABSTRACT. This performance specification establishes the requirements for the Improved Ribbon Bridge Interior Bay and Ramp Bay assemblies, hereafter referred to respectively as IRB-I and IRB-R, or together as bays. The IRB-I and IRB-R together with the Ml977 Common Bridge Transporter (CBT), M15 Bridge Adapter Pallet (BAP), MK I and/or MK II Bridge Erection Boat (BEB), Ml4 Improved Boat Cradle (IBC), and supplementary set SC 5420-97-CL-E51 constitute the float bridge component of the U. S. Army Multi-Role Bridge Company. This performance specification addresses the performance requirements for procurement of the IRB-R and IRB-I assemblies and the interfaces needed to meet the compatibility requirements for transporting, transloading, launching, retrieving, and emplacing the bays.

2. Applicable documents

2.1 General
The documents listed in this section are specified in sections 3 and 4 of this specification. Tb documents cited in other sections of the specification or recommended for additional information effort has been made to ensure the completeness of this list, document users are cautioned that t requirements documents cited in sections 3 and 4 of this specification, whether or not they are listed.

2.2 Government documents The following other Government documents, drawings, and publications form a part of this document to the extent specified herein. Unless otherwise specified, the issues are those cited in the solicitation.

2.2.1 DOCUMENTS
TM 5-5420-209-12 and 34 Standard Ribbon Bridge, Interior/Ramp Bay
TM 5-1940-277-10 Boat, Bridge Erection, Models USCSBMKI and USCSBMK2
TM 5-5420-234-l4&P Truck, Cargo, 10-Ton, 8x8, Common Bridge Transporter Ml977 with and without Winch; and Pallet, Bridge Adapter, M15
SC-5420-97-CL-E5l Supplementary Set, Bridge
TC 5-210 Military Floating Bridge Equipment

2.2.2 INTERFACE DRAWINGS
FIGURE 1: SEE INTERIOR BAY INTERFACES
FIGURE 2: ERR RAMP BAY INTERFACES
FIGURE 3: BAP INTERFACES
FIGURE 4: BEB INTERFACES
FIGURE 5: RAFTING BRACKET
FIGURE 6: METACENTRIC HEIGHT REQUIREMENT
FIGURE 7: TRANSPORTABILITY INTERFACES
FIGURE 8: HYPOTHETICAL VEHICLE TABLES
FIGURE 9: RIBBON RAFT DESIGN
FIGURE 10: LAUNCH REQUIREMENTS
(Unless otherwise indicated, copies of the above documents, drawings, and publications are available from PM Assured Mobility Systems (PM AMS). Copies of the above documents have been provided to the contractor under a seperate cover. Copies of the above documents are in the possession of both the Government and the Contractor and are incorporated by reference.

2.3 Order of precedence
In the event of a conflict between the text of this document and the references cited herein (except for related, associated specifications or specification sheets), the text of this document takes precedence. Nothing in this document, however, supersedes applicable laws and regulations unless a specific exemption has been obtained.

2.4 Definitions.

2.4.1 Normal Crossing. A normal crossing is unrestricted use of equipment within the parameters of this specification.

2.4.2 Caution Crossing. A caution crossing is a crossing of a vehicle class higher than the normal or of a span longer than the normal which is made under restricted crossing conditions. Vehicle Speed is reduced with minimum eccentricity (driver drives down center of bridge with ground guide) and braking and no impact. Only one vehicle is allowed on the bridge at a time. This may not be applicable

to floating bridges. Other conditions are the same as normal. A caution crossing develops the same static stress in the structure as the maximum normal crossing.

2.4.3 Rafting. For the purposes of this performance specification, all rafting operations are considered conventional unless otherwise specified.

3.0 REQUIREMENTS

3.1 First Article Test (FAT). The Government shall conduct a FAT in accordance with the Production Verification Test requirements of 4.2.1 of this specification. The purpose of the PAT shall be to verify that the bridge meets all of the requirements of section three of this specification.

3.2 OPERATIONAL REQUIREMENTS

3.2.1 Bridging and Rafting. The bays shall connect together to configure a bridge consisting of multiple IRB-I bays and two IRB-R bays, or a conventional raft configuration with one to four IRB-I bays, and two IRB-R bays. The IRB-R bays shall provide a smooth transition between a bridge or a raft end the shore. Both configurations shall have a minimum continuous usable roadway width of 4.1-rn (13 ft 5 in) for one-way vehicular traffic and a separate non-skid walkway for simultaneous foot traffic. The roadway surface shall provide adequate traction when dry or wet to insure safe stopping distances for both wheeled and tracked vehicles. The bridge and raft shall be capable of being grounded on a surface free of sharp protrusions under the load conditions specified in 3.2.2 and 3.2.3. The bays shall be equipped with a drainage system in each closed section of the bay to allow for water drainage. The drainage system must be accessible to the crew from ground when bays are on CBT/BAP. The IRB-R bays shall be equipped with a built in lockable, self-draining stowage box designed to accommodate the Basic Issue Items (BII).

3.2.2 Military Load Class (MLC). Both IRB bridge and raft configurations shall be capable of sup tracked vehicles up to and including MLC 70 Tracked CT) under normal crossing conditions. The IRB bridge configuration shall be capable of supporting wheeled vehicles up to and including MLC 96 Wheeled (W) under caution crossing conditions. It is desired that the IRB bridge configuration be capable of supporting MLC 96 (w) vehicles under normal crossing conditions. A de objective is a load capacity of MLC 80 CT) for IRB bridge and raft configurations, and MLC 100 (W) for IRB bridge configuration under normal crossing conditions based on allied nation HET/MBT combinations. See 3.2.4 for stream current conditions.

3.2.3 Vehicle Load Capacity. Both IRB bridge and raft configurations shall be capable of supporting tracked vehicles up to and including 63,504 kg (70-ton) Ml series Abrams tanks under normal crossing conditions. The IRB bridge configuration shall be capable of supporting wheeled vehicles up to and including the Ml070/Ml000 Heavy Equipment Transporter System (HETS) carrying a 63,504 kg (70-ton) Ml Series Abrams tank under caution crossing conditions. It is desired that the IRB bridge configuration be capable of supporting the Ml070/Ml000 HETS carrying a 63,504 kg (70-ton) Ml Series Abrams tank under normal crossing conditions. See 3.2.4 for stream current conditions.

3.2.4 Current conditions. Both IRB bridge and raft configurations under load as defined in 3.2.2 and 3.2.3 shall be able to conduct safe and stable operations and withstand all significant hydrodynamic loads in current conditions as described below:

Water depths required current speeds desired current speed
2.0m (6 ft, 7 in) 1.83 m/s (6 ft/a) 3.05 m/s (10 ft/s)
3.0m (9 ft. 10 in) 2.44 m/s (5 ft/a) 3.0 m/s (10 ft/s)

To ensure operations can be conducted in a safe and stable manner at the design current speeds, loaded rafts and unloaded bays must be able to conduct safe and stable operations at water speeds of 0.3 m/s (1 ft/s) minimum above the design current speeds. This allows for the upstream maneuvering of rafts and bays at the design current speeds.

3.2.5 Reserved

3.2.6 Boats/Anchorage. No more than one BEB for every two IRB-I bays shall be required to hold the bridge in place, one BEB for every three IRB-I bays is desired. The bridge shall be secured by a conventional anchorage system available through the US Army supply system, reference SC-5420-97-CL-E51 Supplementary Set, Bridge and Technical Manual TC 5-210 Military Floating Bridge Equipment. An equivalent, commercially available anchorage system may be proposed as an alternative to the Army system. The raft shall be maneuvered through the water by no more than three BEBs for both conventional and l rafting methods, rafting with no more than two BEBs is desired. Reference Figure 9, Ribbon Raft Design, for minimum acceptable raft size, load class and current velocity requirements for the IRB raft.

3.2.7 Stability. The IRB-I and IRB-R bays shall be self-righting in the folded position in the water.

3.2.8 Bank Height. The IRB-R shall be able to articulate and be adjustable allowing for the raising and lowering of the ramp to accommodate bank heights from 0 to 1.16 meters (0 to 46 inches) above the water level in 4 minute, 3 minutes desired. Bank height is

measured from the surface of the water to the horizontal projection of the top of the bank. The IRB-R articulation shall be operable by the 5th percentile female through 95th percentile male soldiers in accordance with the SOW. If hand pumps are used, the pumps shall be operable by soldiers in the standing position. Any extended handle must be stowable on the IRB-R. The IRB-R shall provide adequate transition between the shore and the IRB-R, and between the IRB-I and adjoining the IRB-I, to accommodate smooth access and egress of tracked and wheeled vehicles within vehicle design. It is desired that the IRB-R be designed such that safe accessing and egressing of the HETS is possible at 1.16 m (46 in) bank heights. It is desired that the IRB-R be able to articulate and be adjustable to accommodate bank heights up to 2.0 meters (79 in) for the accessing and egressing of assault tracked vehicles between the shore and the IRB-R and the IRB-R and the IRB-I.

3.2.9 Hydraulic system (if applicable). If the IRB-R requires hydraulics for ramp articulation, the fluid shall pose no environmental hazard if leaks occur.

3.2.10 Pontoon Leak Test. When tested in accordance with 4.5.5 each individual pontoon shall be capable of maintaining a constant, independent, internally applied air pressure of 1.5 psi, plus or minus 0.1 psi for at least 5 minutes without leakage.

3.2.11 Bay assembly. IRB-I and IRB-R bays shall be capable of being assembled longitudinally by he bridge crew, with BEB assistance, to construct a bridge or raft at a minimum rate of one bay per minute (exclusive of adjusting the assembled bridge bay to the gap length and launching the bridge elements). The IRB-I and IRB-R bays shall be capable of being assembled with the Standard Ribbon Bridge interior bays and ramp bays, hereafter referred to as SRB-I and SRB-R respectively to build hybrid bridges and rafts at a rate of one bay every two minutes, with the desired objective of one bay every minute, (exclusive of adjusting the assembled bridge bay to the gap length and launching the bridge elements). Assembly time begins after a bay is connected to the boat and ends when all bay to bay connections are complete. Construction of 100 !e (328 ft) of bridge, including site preparation, launching and assembly shall take no longer than 1 hour (daytime) and 1.5 hours (night). An additional one hour is allowed when wearing Mission Oriented Protective Posture (MOPP) ensemble and Arctic gear, but not both at the same time, and when operating in blackout conditions.

3.2.12 Cleaning. The IRB-I and IRB-R shall be designed to facilitate cleaning of mud, snow and ice to permit safe recovery with the CBT/BAP. Cleaning required to retrieve a bridge or raft shall take no more than 10 minutes times the total number of bays in the bridge or raft. No special tools shall be required for cleaning. Cleaning required to retrieve a bridge or raft shall take no more than 20 minutes times the total number of bays in the bridge or raft when cleaning ice/frozen mud.

3.2.13 Crew Size. IRB-R and IRB-I sections shall be assembled, in accordance with paragraph 3.2.11. There shall be no increase in crew size over the Standard Ribbon Bridge (SRB) for the same size raft. Refer to TM 5-5420-209-12 and -34 Standard Ribbon Bridge, Interior/Ramp Bay. An example of a typical crew deployment:

- Launch three BEBS (two work boats and one safety boat). Each boat carries a two-person crew.
- Launch the first bridge bay. Six crew members go with two-person crew on one work boat. When the first bridge bay is caught, the six crew members jump to the first bay.
- Launch the second bridge bay. Second work boat catches second bay and maneuvers to first bay. Crew of six connects the two bridge bays together.
- Launch the third bridge bay. Maneuver to connected bays. Crew of six continues to attach bays as required to build the bridge.

3.3 INTERFACE REQUIREMENTS

3.3.1 Standard Ribbon Bridge (SRS) interfaces The IRB-I and IRB-R bays shall interface with the SRB-I and SRB-R, to permit the building hybrid bridges and rafts. Figures 1 and 2 depict the dimensional interface for SRB-I and SRB-R bays. Reference TM 5-5420-209-12 and 34 Standard Ribbon Bridge, Interior/Ramp Bay, for additional SRB information.

3.3.2 Bridge Erection Boat (BEB) interface. The IRB-I and IRB-R shall interface with the MK I and MK II BEBs for all water maneuvers in a manner similar to the SEE attachment. IRB bays shall be equipped with sufficient (points for securing a bay after launch, bridging, and both longitudinal and conventional rafting. Accessible attachment points shall accommodate standard 2.54 cm (1 in) and 1.9 cm (3/4 in) manila/nylon rope. Attachment of BEB to bays shall not exceed 1 minute, 2 minutes with crew in MOPP ensemble and arctic gear, but not both at the same time, and blackout conditions. Maximum forward thrust of the BEBs is 16 kN (3600 lbs); maximum reverse thrust is 9.3 kN (2200 lbs). BEB draft with crew, equipment and fuel is 56 cm (22 in), and 66cm (26 in), when fully loaded. BEB interface dimensions are provided in Figure 4. Reference TM 5-1940-277-10 Boat, Bridge Erection, Models USCSBMKI and USCSBMK2, for additional BEB information.

3.3.3 Rafting Bracket. If the IRB-R and IRB-I sections cannot interface with the existing rafting bracket Part Number 13219E4304, depicted in Figure 5, then a new rafting bracket must be provided. The new brackets must provide the same operational capability as the existing bracket, (interface the unfolded bay a bow profile with the BEB during rafting operations). Reference BEB and SRB TMs for rafting bracket use.

3.3.4 Transport interface The Ml977 CBT NSN 2320-01-442-1940 together with the M15 BAP NSN 3990-01-442-1939 shall hereafter be referred to as the CBT/BAP. The IRB-I and IRB-R shall interface with the CBT/BAP and shall be interoperable for launching, retrieving,

transporting, loading, off loading, and transloading to and from M1076 Palletized Load (PLS) trailer. Figure 3 depicts the dimensional interface for mating the IRB-I and IRB-R to the CBT/BAP Reference TM 5-5420-234-14&P Truck, Cargo, 10-Ton, 8x8, Common Bridge Transporter M1977 with and without Winch; and Pallet. Bridge Adapter, M15 for additional CBT/BAP information.

3.3.5 Weight The maximum transport weight of each IRB-I and IRB-R shall not exceed 6,350 kg (l4000 lbs).

3.3.6 Length The maximum transport length for each IRB-I and IRB-R shall not exceed 6.92 m (272.44 in).

3.3.7 Height The maximum transport folded height for each IRB-I and IRB-R is 2.4 m (94.5 in).

3.3.8 Uploading downloading and transloading. IRB-I and IRB-R bays shall be capable of being loaded onto and removed from the CBT/BAP. The bays shall be capable of connecting to the BAP to allow for uploading and downloading of the BAP with IRB-I and the BAP with IRB-R to and from the CBT. The combination loads of BAP with IRB-I and BAP with IRB-R shall be capable of being transloaded to and from the CBT and the PLS trailer with no change to the current transloading procedure. Reference CBT/BAP TM 5-5420-234-14&P for transloading information.

3.3.9 Bay launch. The IRB-I and IRB-R shall be capable of being launched by the CBT/BAP in currents up to 1.5 m/s (5 fps). Launch Cycle begins after bay is prepared for launch and movement of bay initiates. Launch Cycle ends the instant the bay is free floating in water. Reference Figure 10 for minimum acceptable requirements of water depth, bank height and bank slope requirements for free, controlled and high bank launch operations.

3.3.9.1 Free launch. The IRB-I and the IRB-R bays shall be capable of being free launched into water under the free launch requirements in Figure 10. Free launch time shall not exceed 1 minute for each bay. Free launch is defined as the continuous operation of bay self-deployment from the initiation of bay movement on the CBT/BAP until it is opened and unfolded in the water. Once in the water, the IRB-I and IRB-R must be self-righting and stable under current conditions as defined in 3.2.4.

3.3.9.2 Controlled launch. The IRB-I and the IRB-R bays shall be capable of being control launched into water under the controlled launch requirements in Figure 10. Controlled launch time shall not exceed 5 minutes under calm water conditions (0-1.52 m/s (0-5 fps) currents, center of stream). Controlled launch is defined as a deployment of the bay from the CBT/BAP into the water such that the bay remains connected to the BAP winch hook and in the closed or folded position until the BEB operator safely initiates the bays opening or unfolding. Once in the water, in the closed/folded and open/unfolded configurations, the IRB-I and IRB-R must be selfrighting and stable under current conditions as defined in 3.2.4.

3.3.9.3 High-bank launch. The IRB-I and the IRB-R bays shall be capable of being high-bank launched into water under the high bank launch requirements in Figure 10. High-bank launch is defined as the lowering of the bay from a bank height of 1,528.53 m (5728 ft) by the CBT/BAP into the water such that the bay remains in its closed or folded configuration and is secured by lifting slings available in the SRB supplementary set. The bay remains in the closed or folded position until the BEB operator safely initiates the bays opening or unfolding. Once in the water, in the closed/folded and open/unfolded configurations, the IRB-I and IRB-R must be selfrighting and stable under current conditions as defined in 3.2.4.

3.3.9.4 Helicopter launch. IRB-I and IRB-R bays, without the BAP, shall be capable of being launched into the water in the folded/closed configuration by a CH-47 helicopter.

3.3.10 Bay retrieval. The IRB-I and IRB-R shall be retrieved by the CBT/BAP in no more than 10 min (5 min desired), under calm water conditions (0-1.52 m/s (0-5 ft/s) currents, center of stream). Retrieve Cycle begins after BAP lifting hook has been connected to floating bay. Retrieve cycle ends after bay has been mounted onto CBT/BAP and movement stops.

3.3.11 Bay preparation. Using a crew size of two, it shall take no more than 5 minutes to prepare the bays for launch or transload between CBT/BAP and Ml076 PLS trailer. Bay preparation time begins after the uploaded transporter has arrived at the launch/transload site and ends when bay movement begins.

3.3.12 Transportability. The IRB-I and IRB-R, with and without the BAP, shall be capable of being transported by military or commercial trailers, rail, marine vessels, and aircraft and must be capable of withstanding the impact forces encountered in shipment without damage or permanent deformation. The bays shall be equipped with tiedown and slinging provisions in accordance with interface controls in paragraph 3.3.14 below. It shall take a crew of 2 MOS 12C, using common too1 no more than 15 minutes to prepare a bay for transport. Reference Figure 7 for internal air and rail transportability requirements.

3.3.12.1 Roadway transport. The IRB-I and IRB-R shall be roadway transportable on the CBT/BAP.

3.3.12.2 Air Mobility. The IRB-I and IRB-R, with and without the BAP, shall be capable of air transport on C-5 and C-l7 aircraft. The IRB-I or IRB-R shall be able to be loaded on a CBT/BAP and be air transportable as a combined load on C-5 aircraft. The IRB-I and IRB-R shall also be capable of being externally airlifted, with and without the BAP, by CH-47 helicopters and shall meet the certification requirements for Helicopter Sling Load in accordance with the SOW.

3.3.12.3 Rail Impact. The IRB-I and IRB-R, with and without the BAP, shall be capable of withstanding shock loads resulting from a rail impact test on a cushioned coupled rail car with no measurable deformation, at impact speeds up to 13 km/hr (8.0 MPH).

3.3.12.4 Rail transportability. When loaded on a 1.27 m (50 in) high rail car, the IRB-I and IRB-R bays, with and without BAP attached, shall meet the dimensional requirements of the Envelope B, Reference Figure 7, (a rail diagram for rail transport in NATO countries on the European continent).

3.3.12.5 Marine transportability. The IRB-I and IRB-R, with and without the BAP, shall be transportable on the LARC-LX and larger vessels or ships.

3.3.13 Slinging Provisions. The strength of slinging provisions shall be in accordance with instructions in the SOW. The provisions shall enable the interior bay and ramp bay components to be lifted in the folded position for both normal external lift by helicopter. When lifting with the BAP attached the lifting eyes will be located on the BAP. When lifting without the BAP, the slinging eyes will be located on the top of the IRB-I and IRB-R bays. Provisions shall be located so that not less than 2.54 cm (1 in) clearance is maintained between slings and all exterior parts and shall be fastened to members which will withstand stresses in the amount and direction of pull specified for the provisions without weld failure, permanent deformation, cracking, loosening, or breaking of the provision or its connecting structural components. Slinging provisions may also be used as tiedown provisions in accordance with instructions in paragraph 3.3.14. All slinging provisions shall be labeled LIFT, or LIFT/TIEDOWN, as applicable, in not less than 2.54 cm (1 in) high letters.

3.3.14 Tiedown Provisions. The tiedown provisions shall conform to strength provisions in accordance with instructions in the SOW. All tiedown provisions shall be labeled TIEDOWN, or LIFT/TIEDOWN, as applicable, in not less than 2.54 cm (1 in) high letters.

3.4 OPERATING ENVIRONMENT REQUIREMENTS

3.4.1 Operating Temperatures. The IRB bays will be employed under tactical and weather conditions in a marine environment without the use of any special climatic adapter kit in any ambient temperature in the range of -31.7 C (-25 F) to 51.7 C (+120 F). When excessive ice or hazardous floating debris are present in the water, floating bridge operation will not be conducted.

3.4.2 Storage Temperatures. The IRB bays shall withstand indefinite storage in any ambient temperature in the range of -45.6C (-50 F) to 71.1C (160 F).

3.4.3 Materials

3.4.3.1 Dissimilar metals. Dissimilar metals shall not be used in contact with each other unless protected against galvanic corrosion by an insulating/isolating material.

3.4.3.2 Corrosion control. The IRB-I and IRB-R bays shall operate for a 20-year minimum service life, which can include varying extended periods in corrosive environments involving one or more of the following: high humidity salt spray, road de-icing agents, gravel impingement, atmospheric contamination and temperature extremes. Only normal washing, scheduled maintenance and repair of accidentally damaged areas (not a result of deficiency in design, material, manufacturing or normal wear), shall be necessary to keep the corrosion prevention in effect. During this 20-year service, surface corrosion of ferrous and non-ferrous metals, which may include red, black and/or white corrosion products, shall be a maximum of 1% of the surface of any component. Base metal shall be sound with no loss of original thickness greater than 2% or 0.0254 mm (.001 in), whichever is less. There shall be no affect on form, fit or function.

3.4.3.3 Recovered Materials. For the purpose of this requirement, recovered materials are those that have been collected from solid waste and reprocessed to become a source of raw materials, as distinguished from virgin raw materials. The components, pieces and parts incorporated in the interior bridge bay and ramp bay assembly may be fabricated from recovered materials to the maximum extent practicable, provided the interior bridge bay and ramp bay assembly produced meets all other requirements of this performance specification. Used, rebuilt or remanufactured components, piece and parts shall not be incorporated in the interior bridge bay and ramp bay assembly.

3.4.3.4 Treatment and painting. The portions of the interior bay and ramp bay assembly normally painted shall be cleaned and treated in accordance with instructions in the Scope of Work (SOW), primed and painted with Chemical Agent Resistant Coating (CARC) in accordance with instructions in the SOW. Unless otherwise specified the topcoat color hall be CARC green 383 color chip 34094 in accordance with instructions in the SOW. When camouflage patterns are required, the top coat shall be overcoated in accordance with the Government furnished camouflage patterns and top coat colors in accordance with instructions in the SOW. The FAT pre-production model may be tested without pattern painting. Pattern painting shall be applied to the FAT pre-production model after the FAT has been completed.

3.4.3.5 Positive Buoyancy Material, (if applicable). If material is added to the interior of the bays to meet positive buoyancy

requirements, the material shall not emit dangerous gases when exposed to heat during weld repair.

3.5 OWNERSHIP AND SUPPORT REQUIREMENTS

3.5.1 Reliability. The IRB shall have the following minimum reliability characteristics when evaluated to the IRB Failure Definition Scoring Criteria:

Interior Bay: 36 Mean Deployment Between (Essential Function) Failure
Ramp Bay: 16 Mean Deployment Between (Essential Function) Failure

3.5.2 Maintainability. The IRB-I and IRB-R bays shall be maintainable by personnel performing Preventative Maintenance Checks and Services (PMCS) wearing the full range of military protective clothing, including Arctic and Mission Oriented Protective Posture (MOPP) ensemble gear, but not both at the same time. The bays shall be designed for maintainability with easily replaceable, bolt on components where possible. The IRB shall not exceed a maintenance ratio (MR) 0.52 for Interior Bay and 0.91 for Ramp Bay.

3.5.3 Durability. The IRB shall withstand the following number of crossings without experiencing durability failure as defined in the IRB PDSC:

	Raft	Bridge
MLC 96	0	220
MLC 70	720	6765
MLC 55-57	125	2205
MLC 22-25	1655	10830
MLC<2O	1525	60675

3.5.4 Launch/retrieve durability. The IRB-I and IRB-R shall each withstand 1380 launch/retrieve cycles before experiencing a durability failure.

3.5.5 Fuels and Lubricants. All fluids shall be fire resistant, corrosion resistant, operable in ambient temperatures ranging from -31.7C (-25 F) to 51.7 C (120 F), biodegradable, and pose no environmental hazard if leaks occur.

3.5.6 Tools and Basic Issue Items (BII). No special maintenance procedures will be required below the General Support (GS) maintenance level and the need for special tools will be minimized. No additional special tools for the Organizational or Direct Support level of maintenance are desired. Maintenance tools used on the bridge, launcher and ancillary equipment shall meet Society of Automotive Engineers or metric standards. General purpose test equipment must be capable of direct measurement in metric or both metric and inch-pound units. All common hand tools required for normal operations and routine operator maintenance shall be included in the Basic Issue Items (BlI) and stored for accessibility and transport on the IRB-R. All BII provided will be sufficient and capable of being used to connect either an SRB-I bay or SRB-R bay on an IRB-I bay or IRB-R bay.

3.5.7 Training. No additional training shall be required for the bridge crew. Component commonality with the SRB shall be optimized to avoid an increase of course length for MOS 12C.

3.5.8 Smoke Environment. The IRB shall be employed in smoke environments.

3.5.9 Nuclear, Biological and chemical Contamination (NBCC) Survivability. The IRB-I and IRB-R bays shall be accessible for the decontamination process and withstand both the effects of initial contamination and the decontamination process. Surfaces shall resist absorption of chemical agents and withstand the use of caustic cleaners used in the decontamination process.

3.5.10 Ballistic Survivability. IRB-I and IRB-R bays in both bridge and raft configurations under load as defined in 3.2.2 and 3.2.3 shall possess the ballistic survivability necessary for emergency mission completion while sustaining small-arms fire For this performance specification, an emergency mission is defined as off-loading to shore all vehicular and foot traffic, disassembly, return to shore and retrieval from water of damaged bay(s). The bays shall be capable of withstanding a 9 to 15 round burst of .50 Caliber machine gun fire at a range of 500 m on any single bay of the bridge or raft without degrading the load capacity of the system. The bays shall also be capable of withstanding the effects of a single large caliber (155 millimeter equivalent) artillery fragmentation at a distance of 20.0 m. For design purposes, assume a 100m (328 ft) bridge length, or a six bay raft ferrying a 90m wide waterway. Hole size and pattern to be supplied at a later date.

3.5.11 Manpower. The IRB-I and IRB-R bays shall be deployable and recoverable by the bridge crew under all operational conditions within the prescribed performance time standard. No additional manpower will be required to prepare, deploy and recover the IRB assemblies.

3.5.12 Personnel. The IRB assemblies shall be designed for simplicity of maintenance, deployment and recovery by designated bridge crew. Cognitive and physical requirements for the crew shall be less or similar to the SRB. No new MOS and ASI shall be required. The

IRB-I and IRB-R will be assembled and maintained at the unit level by designated soldiers.

3.5.13 Human Factors Engineering. The IRB assemblies shall be capable of being assembled, deployed and recovered by the 5th percentile female through 95th percentile male soldiers wearing MOPP ensemble and Arctic gear, but not both at the same time. Lifting weight limit for female soldier shall not exceed 42 pounds and 82 pounds for male soldier when carrying an object 10 meters or less. The contractor shall ensure that human factors engineering design criteria are considered during the design and developmental process of the IRB bays. Human factors requirements must include provisions for effective soldier-machine interface (SMI) and preclude system characteristics which require extensive cognitive, physical, or sensory skills; complex manpower or training intensive tasks; or which result in frequent or critical human performance errors during assembly, maintenance, deployment and recovery of the system.

3.5.14 Safety. The IRB bays shall conform to the safety requirements of the SOW. External surfaces shall be free from burrs, slag, sharp edges, and corners except where sharp corners and edges are required. All rotating and reciprocating parts and parts subject to high temperature shall be guarded when such parts are exposed to contact by operator or maintenance personnel or otherwise create a hazard. High temperature areas that cannot be guarded or enclosed shall be labeled. All platforms and steps shall have a surface that provides safe traction by personnel in icy, wet or muddy conditions and shall minimize the accumulation of debris. All walking and stepping surfaces shall be equipped with a non-slip material. An adhesive type of non-slip material (tape like) is not acceptable. Nonslip functionality shall be maintained when the surface is wet, muddy, dry, and greasy or partially snow covered. Handrails are required along the walkway.

3.5.15 Identification Marking. The IRB-I bays and IRB-R bays shall be furnished with an identification plate showing Contractors model number, National Stock Number, USA Registration Number, Date of Manufacture, Contractors name, Contract number, Serial number and weight. The plate shall be affixed to the bays in a conspicuous location and be attached by mechanical fasteners which result in permanent attachment to all vehicle surfaces, including Chemical and Resistive Coating (CARC) painted areas.

3.5.16 Shipping Data Plate. A shipping data plate shall be provided for each IRB-I bay and IRB-R bay. The data plate shall show a silhouette of the side and end views of the IRB-I bay and IRB-R bay. Overall dimensions, lifting and tiedown provisions and the center of gravity locations shall be depicted. Mechanical fasteners which result in permanent attachment to all vehicle surfaces, including Chemical and Resistive Coating (CARC) painted areas, and shall attach the plates in a location where the plate or label will be both visible and legible.

3.5.17 Instruction Plates. Each IRB-I bay and IRB-R bay shall be equipped with manufacturers standard instruction plates, including any warnings and cautions. Any special or important procedures to be followed in deployment, retrieving, operating or servicing bays shall be identified. Plates(s) describing safety measures, cautions or warnings against operation detrimental to bays shall be in accordance with the SOW. Plates shall be attached by mechanical fasteners which result in permanent attachment to all vehicle surfaces, including Chemical, and Resistive Coating (CARC) painted areas. The plates shall be attached in a location where they will be both visible and legible.

3.6 OTHER CHARACTERISTICS

3.6.1 Bank Conditions

3.6.1.1 The ramp must accommodate banks with a transverse slope of 1 in 20.

3.6.1.2 The ramp must accommodate banks with a longitudinal slope of 1 in 10 for any bank height up to the maximum required.

3.6.1.3 The ramp must accommodate banks with steps, bumps, or depressions anywhere under the ramp of 7150 mm (6 in). Steps, bumps, or depressions are exclusive of rocks or other submerged debris which would induce high point loadings onto the bottom of the ramp.

3.6.1.4 The ramp must accommodate banks with a bearing pressure of down to 110 kN/m2 (1.0 ton/ft2).

3.6.2 RAMP

3.6.2.1 The ramp toe height must not be greater than 75 mm (3 in).

3.6.2.2 The ramp deck slope, when set to accommodate the maximum required bank height and in an unloaded condition, will not exceed 1 in 6.

3.6.2.3 When the IRB-R bay is grounded, the ramp shall articulate such that the bottom of the ramp toe is level with the ground.

3.6.3 Vehicle Load: The Normal Crossing Rating is given by taking the vehicle load times impact with the vehicle at full eccentricity and with all additional loads applied. Hypothetical Vehicle Data can be found in Figure 8. Loads induced by a Normal Crossing load are considered to be the design load.

3.6.4 Vehicular Traffic

3.6 4 1 Vehicle Crossing Speed. The bridge must accommodate vehicular traffic up to 40 KPH (25 mph) for vehicles up to MLC 40 and 25 KPH (15 mph) for vehicles over MLC 40. The ramps must accommodate 25 kph (15 mph) for vehicles up to MLC 40 and 8 kph (5 mph) for vehicles over MLC 40.

3.6.4.2 Vehicle Spacing: The bridge must accommodate crossing vehicles spaced a minimum of 30.48 m (100 ft) between ground contact points along the entire length of an assembled bridge, or one wavelength (which ever is less) for higher MLC vehicles.

3.6.4.3 Vehicle Eccentricity: The bridge must accommodate crossing vehicles loaded anywhere on the roadway surface without deck deformation.

3.6.4.4 Vehicle Partially Off Roadway Surface: The bridge must accommodate individual wheel loads, not to exceed 3.6 t (4.0 tons) at 690 kN/m2 (100 psi), up to 0.30 m (12 in) from the roadway surface without permanent deformation. These loads will only occur when the bridge is being crossed by the maximum rated vehicle load at maximum eccentricity and, over the design life of the bridge, will not occur more than 10 times per bay. Impact factors or other dynamic affects will not be applied to these loads.

3.6.5 Additional Loads for Normal Crossing Rating: In order to achieve the Normal Crossing rating, vehicle loads must be factored by these additional loads:

3.6.5.1 Impact Factor: Static vehicle loads will be factor by 1.15 when on Interior Bays and 1.2 when on Ramp Bays to simulated dynamic affects.

3.6.5.2 Mud Load: A load of 0.75 kN/m2 (15.67 lbf/ft2) to simulate the effects of mud will be accounted for over the entire roadway surface.

3.6.5.3 Footwalk Load: A load of 1.92 kN/m2 (40 lbf/ft2), to simulate the effects of soldiers on the walkway will be accounted for over the entire surface of the footwalk.

3.6.6 Grounding

3.6.6.1 When grounded, IRB bays shall be able to withstand the Normal Crossing load on sc with a bearing capacity down to 96 kN/m2 (1 ton/ft2).

3.6.6.2 When grounded, IRB bays shall be able to handle ground conditions with steps, bumps, or depressions of 7150 mm (6 in) anywhere on the bottom of the bays. Steps, bumps, or depressions are exclusive of rocks other submerged debris which would induce high point loadings onto the bottom of the ramp.

3.6.7 Hydrodynamic Loads. When subjected to the maximum current condition, the bridge and raft must be able to withstand hydrodynamic loads caused by corresponding water depths as defined in 3.2.4.

3.6.8 Freeboard. Minimum freeboard values will be 0.05 m (2 in) below the roadway surface. For Caution Crossing conditions, up to 0.05 m (2 in) of water in allowed on the roadway surface within a crossing vehicles footprint.

3.6.9 Trim. The deck slope will be no more than 71 in 20 with a vehicle at maximum eccentricity with additional loads and hydrodynamic loads applied.

3.6.10 Additional. Affects The additional loads and affects must be considered in the design:

3.6.10.1 Wind. Wind speeds up to 20 m/s (38.8 knots) on the bridge and crossing vehicles and up to 30 m/s (58.3 knots) on the bridge alone.

3.6.10.2 Ice. The unbalanced load due to ice forming from spray or during launch shall be accounted for by multiplying the exposed surface area to one side of the centerline times 27 N/rn2 (2.75 kp/m2, 0.56 lbfft2). This represents an ice load of 3 ma (0.12 in) thickness.

3.6.10.3 Braking and Skewing. Braking forces from wheeled or tracked vehicles and skewing forces from tracked vehicles. Bridge shall resist damage from normal steering correction inputs of crossing tracked vehicles.

3.6.10.4 Other Grounding Affects. Grounding pontoons on one side including the effect of vehicle load on the structure, the bottom-akin load given in the design parameters, and the possibility of bridging between two groundings.

3.6.10.5 Locking. Possible locking of articulating connections cause by frozen ice or mud or from other effects.

3.6.10.6 Vehicle Spacing. Increasing stress resulting from the fact that on a floating bridge a single vehicle may impose a greater stress than several vehicles at the minimum spacing.

3.6.10.7 Wave Length. There may be a critical spacing and/or speed related to the natural crossing water wavelength or band-reflected wave trough.

3.6.10.8 Rafting. On a raft the vehicle loads will be concentrated, with no spacing. The impact factor will not be considered in this situation.

3.6.10.9 Hydrodynamic Drag. The horizontal component of hydrodynamic force. For a raft thin force includes the propulsion force which may act in any direction. For a floating bridge where propulsion units or anchors counteract drag, the following effects must be allowed: failure of alternate propulsion unite or anchors; failure of alternate anchors, if the anchor spacing is not less than 14.0 m (45 ft. 11 in); or failure of all anchors within a 14.0 m (45 ft, 11 in) length. Assume no vehicle on bridge or raft when failure occurs. This assumes the remaining propulsion units or anchors can take the increased load. This effect is also considered to cover the effect of floating debris on unprotected structures.

3.6.10.10 Draw down. The vertical component of hydrodynamic force caused by the shallow-water and fast current must be considered.

3.6.10.11 Worst Case Shallow Water Condition at Bank for Ramp and Flotation Riverbed slopes down 1 in 7 from waters edge.

3.6.10.12 Flotation. The bridge and raft must have 20% reserve buoyancy in still water when crossed under Normal Crossing conditions. Load distribution between flotation units must also be considered. Buoyancy shape must allow for wave formation.

3.6.10.13 Stability. The bridge, when supporting a Normal Crossing load must have a metacentric height that is equal to or greater than 5 times the distance from the equipment centerline to the maximum load class vehicle center of gravity (Ca). Reference Figure 6 for Metacentric Height.

3.6.10.14 Damage Tolerance. When fatigue cracking occurs in service the remaining structure shall sustain the maximum design conning load without failure until the damage is detected. A fracture control plan shall be established in accordance with the SOW giving inspection methods, material data requirements, assumed initial crack size, required inspection frequency end required inspection method.

3.6.10.15 Allowable Stress: allowable stress under the design load is as follows:

3.6.10.15.1 Bending and/or Tension: The lesser of the following will be used:

$$\frac{\text{Ultimate Strength}}{1.5} \quad \text{or} \quad \frac{\text{0.2\% Proof Stress or Yield Stress}}{1.33}$$

3.6.10.15.2 Shear: The value from Bending and/or Tension multiplied by 0.6.

3.6.10.15.3 Bearing: The value from Bending and/or Tension multiplied by 1.33.

3.6.10.15.4 Buckling: Where failure can occur because of buckling, the following allowable stress will be used:

$$\frac{\text{Buckling Stress}}{1.5}$$

4. VERIFICATION

4.1 Methods of Verification

4.1.1 Test. Verification shall be accomplished through systematic operation of the end item under appropriate conditions, with or without instrumentation, and the collection, analysis, and evaluation of quantitative data.

4.1.2 Analysis. Verification shall be accomplished by technical or mathematical evaluation, mathematical models or simulations, algorithms, charts, or diagrams, and representative data.

4.1.3 Examination. Verification shall be accomplished by visual examination of the end item or its components, reviewing, descriptive documentation, certifications, and comparing characteristics to established criteria.

4.1.4 Demonstration Verification shall be accomplished by appropriate functional checks and/or operation of the end item or its components.

4.1.5 Certificate of Conformance (C of C). A document certifying conformance to a specific requirement or standard signed by the certifying official or responsible party. When required by contract or this specification, C of Cs are used in lieu of additional verification methods and must include supporting documentation.

4.2 Classes of Verification

4.2.1 First Production Unit Inspection (FPUI). An inspection of the first produced IRB-I and IRB-R conducted by the manufacturer, witnessed by the Government, and performed at a manufacturer test site. Purpose of the inspection shall be to determine conformance of the bays to the requirements shown in the applicable column of TABLE I.

4.2.2 Shakedown Verification Test. A test of end items, conducted by the manufacturer as part of the First Production Unit Inspection, and performed at a manufacturer test Site, to establish performance, design and/or material conformance to requirements.

4.2.3 Production Verification Test (PVT). A test of regular production end items, conducted by the government and performed at a Government test site, to establish product conformance to requirements and production capability.

4.2.4 Quality Conformance Inspection (QCI). A final inspection of the end item performed before government acceptance of a production unit utilizing a Final Inspection Record (FIR). The FIR is a quality record, which documents all verification actions performed on each production unit, both in-process and final, with documented results and corrective action.

4.2.5 Control Test (CT). Additional tests and examinations performed by the contractor beyond those for QCI, on a single production unit. Units selected for this test are based on lot sampling.

4.3 Verification Matrix. Table I displays the verification method and class (event) for each section 3 requirement listed. All verifications referenced in this table may be modified at the discretion of the government by deletion or addition of items listed to assure conformance to specification and/or contractual requirements.

4.4 First Production Unit Inspection (FPUI)

4.4.1 In-Process Inspection. During fabrication of first production bays, in-process inspections shall be performed by the contractor and witnessed by government representatives, to evaluate conformance to section 3 requirements referenced in Table I for those items and/or processes which can not be evaluated once the end item is in its final form. In addition, evaluation of process controls and workmanship will be made at this time. During the inspection, the contractor shall have available for review and evaluation the following records: quality manual (or appropriate document), work instructions, process procedures, inspection records, and welder certifications. When directed by the government, these inspections shall be made prior to the application of primer and paint. All processing and welding procedures, inspection records, calibration procedures and welder certifications shall be available for review and evaluation.

4.4.2 Contractor Inspection. Two first production bays, one IRB-I and one IRB-R, shall be inspected by the contractor, as a minimum, to the requirements of Table I. Upon completion of inspection, the contractor shall submit these bays, and all records associated with their inspection, to the designated government element for review and/or additional verification. The government reserves the right to witness and/or participate in the contractor inspection.

4.4.3 Shakedown. Following the contractor inspection, the bays shall be subjected to a shakedown test to verify suitability to proceed to the PVT. The shakedown shall include an interface compatibility test with SRB ramp and interior bay sections, and be performed utilizing a CBT with BAP, two BEBs and a PLST, all furnished by the government. The shakedown shall consist of a total of 644 km (400 miles) of road testing on paved roads at speeds up to 55 mph, and on unpaved secondary roads at speeds up to 45 mph. One IRB-I shall receive 322 km (200 miles) of the road test, and one IRB-R the remainder. Following road testing, 50 controlled launches and retrievals, and 50 free launches and retrievals shall be accomplished under calm water conditions (0-1.52 m/s (0-5 fps.) During this test, the bays shall be connected together a minimum of five times. Also, at least five times, the bays shall be connected to test interface compatibility, alternating SRB bays with IRB bays. Every other time the connected bays shall start with an IRB-R section. Verification of opening, unfolding and self-righting abilities shall be performed. The bays shall be configured into a raft, and maneuvered sufficiently to verify rafting stability and BEB compatibility. Payload shall be at the contractors option. The raft shall be operated longitudinally, attaining relative speeds of 2.44 m/s (8 fps). The metacenter shall be calculated in accordance with Fig. 6 to verify the requirements of 3.6.10.13.

Four cycles of uploading, downloading and transloading shall be accomplished in accordance with 3.3.8 with both the IRB-I and IRB-R in the BAP.

An Overload test shall be performed to verify the requirements of paragraphs 3.6.10.15 through 3.6.10.15.4. The overload test plan will be supplied by the government.

Periodic inspection of the bridge bays shall be accomplished for wear, damage caused by transport, deployment, retrieval, incompatibility with transport equipment, permanent deformation, cracking, leakage, premature component wear or failure, malfunction, corrosion, failure due to test cycles, design or manufacturing defects and deficiencies. Damage to the CBT and/or BAP attributable to the bridge bays shall also be considered. Such damage, wear, failure, cracking, leakage, incompatibility, design or manufacturing defects, deficiencies, deformation, or malfunction may be cause for rejection of the test units.

4.4.4 First Production Bay Disposition. The bays used for FPUI shall, unless otherwise specified by contract, be delivered as part of the test quantity for the production Verification Test. Prior to delivery; they shall be restored to like new condition, except for reasonable wear and tear not affecting function or durability, and shall represent the finalized configuration.

4.5 Production Verification Test (PVT). Upon completion of FPUI, production bays shall undergo production verification testing at a designated government approved test site to evaluate conformance to section 3 requirements as referenced in Table I. In addition to the methods used to verify conformance to the requirements, the following testing shall be accomplished to verify specific section 3 requirements as indicated. When required by contract, after completion of PVT, test unit shall be updated to the approved final configuration and refurbished as required. In the event of any test failures of the bridge bays during the PVT, the government reserves the right to again perform any or all tests as it deems necessary after contractor correction of the defects. Further testing shall be to verify the success of the corrections, and suitable performance of the bridge bays. The contractor shall bear responsibility for any schedule delays and any additional costs incurred.

4.5.1 Functional Performance, Reliability and Durability. A test procedure shall be developed, incorporating road testing and functional testing as outlined below. Its purpose shall be to verify reliability, maintainability, durability and performance oriented requirements of section three. The combination of CBT, BAP, and IRB-I and IRB-R bays shall accumulate road test miles over roads of the following types as indicated:

TYPE	% OF TOTAL MILEAGE	SPEED
High speed paved	60	Up to 55 mph.
Improved gravel	30	Up to 45 mph.
Cross country	10	Up to 15 mph

To verify the requirements of 3.5.1 and 3.5.2, reliability and maintainability testing shall be conducted in a mission type scenario. A sufficient number of deployments shall be conducted to verify the requirements. A deployment sequence shall consist of: launch, raft assembly, vehicle on load, rafting trip, vehicle off load, raft disassembly, bridge assembly, vehicle crossings, bridge disassembly, and retrieval. Each deployment shall be followed by road testing of all bays on the CBT/BAP for a distance of 47.5 km (30 miles).

Deployments shall be accomplished at river sites with currents up to 2.44 meters/second (8 feet per second (fps). Bay sections shall be maneuvered by the BEB for all operations in the water. High bank launch capability of 3.3.9.3 shall be demonstrated during this test. At least one river site shall have a bank height of 1.16 meters (+0, -0.16) in accordance with 3.2.8.

To verify the requirements of 3.5.3 and 3.5.4, durability testing will be performed with the system deployed as a bridge, and will involve cycles of launch and retrieval, and vehicle crossings of the number, class and type as shown in the following table. Total launch/retrieval cycles shall be 1380. The number of launch/retrieval cycles, and vehicle crossings performed previously in the reliability testing may be subtracted from these totals. Both free launches and controlled launches shall be accomplished at a ratio of 10 to 1 respectively to determine conformance to 3.3.9.1 and 3.3.9.2. Bay retrieval and preparation shall be performed to the requirements of 3.3.10 and 3.3.11. Transloading shall be demonstrated to verify the requirements of 3.3.8. Water depth during crossings shall be approximately two meters in accordance with 3.2.5.

LOAD	CAUTION CROSSING	NORMAL CROSSING
MLC 70 Tracked	0	6765
MLC 96 Wheeled	220	0
Ml070/Ml000 HETS W/M1	15	0
HMMWV	0	10
PLS with Trailer	0	10
5 Ton Cargo Truck	0	10

Periodic inspection of the bridge bays shall be accomplished for wear, damage caused by transport, deployment, retrieval or vehicle crossings, incompatibility with transport equipment, permanent deformation, cracking, leakage, premature component wear or failure, malfunction, corrosion, failure due to test cycles, design or manufacturing defects and deficiencies. Damage to the CBT and/or BAP attributable to the bridge bays shall also be considered. Such damage, wear, failure, cracking, leakage, incompatibility, design or manufacturing defects, deficiencies, deformation, or malfunction may be cause for rejection of the test units. At the governments option, crossings may be a combination of actual vehicle crossings and test fixture simulated crossings. A portion of the crossings may

be eliminated if the government deems that analysis of previous test data satisfies requirements. Every bay shall receive a visual inspection for damage, leakage and cumulative wear immediately following retrieval after crossings. Inspection shall be performed to verify secure and proper connection of the bays with the BAP.

4.5.2 Freeboard. Freeboard shall be observed during various test procedures under the specified current conditions in both raft and bridge configurations. With imposed loads from paragraphs 3.2.2 and 3.2.3 with the vehicles situated in the most extreme off-center positions of the bridge or raft, conformance to 3.2.4 shall be verified.

4.5.3 Compatibility. Compatibility of the bridge with the MKI and MKII BEB shall be verified under current conditions specified in 3.2.4. Design of the bridge shall allow it to be held in place at a ratio of one BEB per every three IRB-I bays for temporary bridging. Under the most severe loading conditions of paragraphs 3.2.2 and 3.2.3, in specified currents of 3.2.4, the raft shall be capable of fully controlled maneuvering by no more than three BEBs in upstream, downstream and crosscurrent directions. Ability of the bridge to be secured with a conventional anchorage system as specified in 3.2.6 shall be demonstrated.

4.5.4 Ramp Articulation. During testing procedures the full ramp articulation shall be demonstrated a minimum of 100 cycles to verify the requirements of 3.2.8 using personnel of the specified percentiles.

4.5.5 Ponton Leak. Internally pressurize with air each individual ponton of the bridge bay to 10.3 kPa (1.5 psi), plus or minus 0.7 kPa (0.1 psi), and maintain pressure while soap testing for leaks. If leakage occurs, remove the pressure from the ponton, repair the leak, and repeat the leak test for each repaired ponton. Evidence of any leakage that cannot be repaired shall constitute failure of this test. After all identified leaks have been repaired, the ponton is to be pressurized to 10.3 kPa (1.5 psi), plus or minus 0.7 kPa (0.1 psi), and the air source is to be disconnected and the pressure held for five minutes. Nonconformance to 3.2.10 shall constitute failure of this test.

4.5.6 Reliability and Maintainability. The R/M requirements shall be verified by Government conducted technical and production tests. The IRB Failure Definition Scoring Criteria (FDSC) will be used to evaluate test incidents.

4.5.6.1 Reliability. To determine conformance to 3.5.1 the reliability requirements shall be demonstrated at a 70% confidence level. A sufficient number of deployments shall be conducted to verify the requirements at 70% confidence level. The deployment is defined as a bay being transported to and put into the water and used both for rafting and bridging, then being retrieved. Reliability is computed by dividing the total number of deployments by the total number of the appropriate failure category from the IRB FDSC.

4.5.6.2 Maintainability. To determine conformance to 3.5.2, the Maintenance Ratio (MR) shall be calculated using the total chargeable scheduled and unscheduled maintenance man-hours divided by the total number of launches. Personnel wearing the protective clothing specified in 3.5.2 shall successfully perform all of the PMCS outlined in the TMs, and shall perform all operations necessary in the deployment of the bridge bays. Failure to be able to conduct any portion of the PMCS, or operate the bridge bays with the protective clothing in place shall constitute failure of this test.

4.5.6.3 Failure Definition Scoring Criteria. The Government shall unilaterally determine conformance to 3.5.1 and 3.5.3 by scoring failure incidents and severity classification on each system using the IRB FDSC.

4.5.7 Verification of Desired Characteristics. When the bridge bays submitted for testing are represented by the supplier as meeting any of the desired performance objectives of this specification, they may, at the Governments option, be tested to the greater requirement.

4.6 Quality Conformance Inspection (QCI). Each unit produced shall undergo a complete final inspection by the contractor to the degree necessary to assure a defect free product. This inspection shall include those section 3 requirements as referenced in Table I. The QCI shall be conducted and documented using a contractor prepared and government approved Final Inspection Record (FIR).

4.7 Control Test (CT). Control tests for maintaining and evaluating process control shall be conducted by the contractor as referenced in Table I. This test is performed on selected units after completion of QCI.

4.7.1 Frequency. The government shall randomly select one production unit Out of 20 successive units produced or one months production, whichever is less, for control test. There shall be no more than 2 or less than 1 control test in any 30 calendar day period. The government reserves the right to witness and/or participate in control tests.

TABLE I

VERIFICATION MATRIX

VERIFICATION LOCATION:

FPUI	First Production Unit Inspection	Manufacturers Facility
PVT	Production Verification Test	Government Test Site
QCI	Quality Conformance Inspection	Manufacturers Facility
CT	Control Test	Manufacturers Facility

SECTION	PARAGRAPH TITLE	FPUI	PVT	QCI	CT
3.2.1	Bridging and Rafting	X(1)	X	X(1)	X(1)
3.2.2	Military Load Class		X		
3.2.3	Vehicle Load Capacity		X		
3.2.4	Current Conditions		X		
3.2.5	Reserved				
3.2.6	Boats/Anchorage		X		
3.2.7	Stability		X		
3.2.8	Bank Height		X		
3.2.9	Hydraulic System	X(2)	X	X(2)	X(2)
3.2.10	Ponton Leak	X	X	X	X
3.2.11	Bay Assembly	X			
3.2.12	Cleaning	X			
3.2.13	Crew Size	X			
3.3.1	Standard Ribbon Bridge Interface	X	X		X
3.3.2	Bridge Erection Boat Interface	X	X		
3.3.3	Rafting Bracket		X		
3.3.4	Transport Interface	X	X		X
3.3.5	Weight	X	X		X
3.3.6	Length	X	X		X
3.3.7	Height	X	X		X
3.3.8	Uploading, downloading and transloading		X		
3.3.9	Bay Launch		X		
3.3.9.1	Free Launch		X		
3.3.9.2	Controlled Launch		X		
3.3.9.3	High bank launch		X		
3.3.9.4	Helicopter launch		X		
3.3.10	Bay Retrieval		X		
3.3.11	Bay Preparation		X		
3.3.12	Transportability		X		
3.3.12.1	Highway Transport		X		
3.3.12.2	Air Mobility		X		
3.3.12.3	Rail Impact		X		
3.3.12.4	Rail Transportability		X		
3.3.12.5	Marine Transportability		X		
3.3.13	Slinging Provisions		X		
3.3.14	Tiedown Provisions		X		
3.4.1	Operating Temperatures		X		
3.4.2	Storage Temperatures		X		
3.4.3.1	Dissimilar Metals	X(*)			
3.4.3.2	Corrosion Control	X(*)		X(3)	X(3)
3.4.3.3	Recovered Materials	X(*)			
3.4.3.4	Treatment and Painting	X(*)		X	
3.4.3.5	Positive Buoyancy Material	X(*)			
3.5.1	Reliability		X		
3.5.2	Maintainability		X		
3.5.3	Durability		X		
3.5.4	Launch/Retrieval Durability		X		
3.5.5	Reserved				
3.5.6	Tools and Basic Issue Items (BII)		X		
3.5.7	Training		X		
3.5.8	Smoke Environment		X		
3.5.9	NBC Contamination Survivability		X		
3.5.10	Ballistic Survivability	X(*)			
3.5.11	Manpower		X		
3.5.12	Personnel		X		
3.5.13	Human Factors Engineering		X		

3.5.14	Safety	X	X	
3.5.15	Identification Marking	X	X	X
3.5.16	Shipping Data Plate	X	X	X
3.5.17	Instruction Plates	X	X	X
3.6.1	Bank Conditions		X	
3.6.2	Ramp		X	
3.6.4.1	Vehicle Crossing Speed		X	
3.6.4.2	Vehicle Spacing		X	
3.6.4.3	Vehicle Eccentricity		X	
3.6.4.4	Vehicle Partially Off Roadway Surface		X	
3.6.5	Additional Loads for Normal Crossing Rating		X	
3.6.6	Grounding		X	
3.6.7	Hydrodynamic Loads		X	
3.6.8	Freeboard		X	
3.6.9	Trim		X	
3.6.10	Additional Effects		X	

* Analysis and/or Certification required

1 Inspection for application of non-skid materials, if any, and for function of drainage system devices.
2 Inspection for operation of IRB-R articulation
3 Examine for application of corrosion control materials, if used.

FIGURE 9 RIBBON RAFT DESIGN

CAPABILITIES		CURRENT VELOCITY (MPS/FPS) AND LOAD CLASS							
RAFT		0-.9	1.2	1.5	1.75	2	2.5	2.7	3
		0-3	4	5	6	7	8	9	10
3 BAY	L	45	45	45	40	40	35	30	25
(2 RAMPS/1 INTERIOR)	C	45	45	35	25	15	10	0	0
4 BAY	L	70	70	70	60	60	60	55	45
(2 RAMPS/2 INTERIORS)	C	60	60	60	55*	40*	30*	15*	0
5 BAY	L	75	75	75	70	70	70	60	60
(2 RAMPS/3 INTERIORS)	C	75	70	70	70*	60*	50*	25*	0
6 BAY	L	W96/T80	96/80	96/80	96/70	96/70	96/70	70/70	70/70
(2 RAMPS/4 INTERIORS)	C	W96/T75	96/70	96/70	70/70*	70/70*	55/55*	30/30*	0

NOTES:
1. The asterisk (*) indicates that 3 bridge erection boats are required for conventional rafting of 4, 5, or 6 bay rafts in currents greater than 1.5 MPS/5FPS.
2. When determining raft classification, L refers to Longitudinal and C refers to Conventional rafting.
3. If the current velocity in the loading/unloading areas is greater than 1.5 MPS/5FPS, then conventional rafting must be used.
4. The roadway width of a Ribbon raft is 4.1M (13 ft 5 in).
5. The draft of a fully loaded Ribbon raft is 61CM (24 in).
6. NEVER load vehicles on Ribbon ramps bays. Only interior bays may be loaded.

FIGURE 10 LAUNCH REQUIREMENTS

FM 5-34 Launch Restrictions

	FREE LAUNCH	CONTROLLED LAUNCH	HIGH BANK LAUNCH
Minimum depth of water required CM (in)	Ramp Bay 112 (44) Interior Bay 92 (36) (Note 1)	76 (30) (Note 2)	76 (30) (Note 2)
Bank height Restrictions M (ft)	0 1.5 (0 5)	0	1.5 8.5 (5 28)
Bank slope restrictions	0 30%	0 0%	Level ground unless front of the truck is restrained.

Note 1. The launch is based upon a 10% slope with the transporter backed into the water. The required water depth for a 30% slope with a 5 ft bank height is 183 CM (72in). Interpolate between thse values when needed.

Note 2. This is recommended water depth. Launch could technically be conducted in 43 CM (17in) of water.

TM 5-5420-209-12
SRB w/M812 or M945

	FREE LAUNCH	CONTROLLED LAUNCH
Bank Height	page 2-43: < 60 inch	
Water Depth	page 2-48: > =36 inch for interior, > = 44 inch for ramp (1)	page 2-55: > = 30 inch desired = 17 inch with care
Shore Slope	page 2-48: < = 30%	

TM 5-5420-234-14&P
SRB w/CBT/BAP

	FREE LAUNCH	CONTROLLED LAUNCH
Bank Height		
Water Depth	page 2-64: < = 42 inch for interior, > = 50 inch for ramp (1)	page 2-64: > = 42 inch for interior > = 50 inch for ramp (1)
Shore Slope	page 2-64: < = 20%	< = 20%
Water Velocity	< 8 fps	< 5 fps

(1) Ramp requires deeper water.
(2) Contradiction within TM 5-5420-209-12 on water depth.

ATTACHMENT 002

ITEM UNIQUE IDENTIFICATION (IUID)

Copies of the graphic representations of the Item Unique Identification have been provided to the contractor under a sepearte cover. Copies of the graphic are in the posession of the Government and the contractor and are hereby incorporated into the contract by reference; that you are to use under this Contract as referenced in paragraph C.17.2.

See website: http://contracting.tacom.army.mil

ATTACHMENT 003

Projected IRB Fielding Schedule thru FY11

UNIT	COMPONT	LOCATION	DATE
739th	Army Reserve	Granit City, IL	2nd Quarter FY07
1438th	National Guard	Rolla, MO	2nd Quarter FY08
957th	National Guard	Bismark, ND	3rd Quarter FY08
1041st	National Guard	Rock Springs, WY	4th Quarter FY08
189th	National Guard	Tazwell, VA	FY09
250th	National Guard	Danielson, CT	FY09
401st	Army Reserve	Norman, OK	FY09
2225th	National Guard	Marrero, LA	FY09
362nd	AC	Ft Benning, GA	FY10
436th	National Guard	Redding, CA	FY10
551st	National Guard	El Campo, TX	FY11
MRBS-23	National Guard	Ft Worth, TX	FY11

Attachment 004

Government Configuration Management Plan dated December 2002.

Copies of this document have been provided to the contractor under separate cover. Copies of the document are in the Governments and Contractors possession and are hereby incorporated into the contract by reference.

ATTACHMENT 005

Listing of Parts required under CLIN 1013

NATIONAL STOCK NO.	PART NUMBER	NOMENCLATURE	QTY
5360-12-179-8256	027072401	SPRING,HELICAL,EXTE	40
4330-12-356-0009	909470306 (AS010-00)	FILTER,ELEMENT	20
NO NSN	909773194	O-RING PART delete, part of kit	
5330-12-356-2205	024009402	PARTS KIT	20
5420-12-179-0324	027073803	TRUNNION NUT,LOWER	10
5420-12-179-0322	027072101	LEVER,REMOTE CONTROL	10
5310-12-142-0650	939040	WASHER,LOCK	10
	DIN127-B12-FST-A		
5305-12-142-8266	931660	SCREW,CAP,HEXAGON	10
	DIN931-M12X60-10		
5420-12-179-0325	027071801	SCREW,PIN DRIVE	10
5420-12-179-8843	027072901	RETAINER,TRUNNION	10
5310-12-142-0649	939036	WASHER,LOCK	100
	DIN127-B10-FST-A		
5305-12-141-9891	932563	SCREW,CAP,HEXAGON H	50
	DIN933-M10X25-10		
5310-12-179-7655	027072801	WASHER,FLAT	50
5420-12-179-0326	027073802	TRUNNION NUT,UPPER	10
5305-12-155-0838	933700	SCREW,CAP,SOCKET HE	10
	DIN912-M16X70-8.8-A3P		
5340-12-356-6970	027017204	RECEPTACLE,FRICTION	6
5315-12-192-5816	941998	PIN,COTTER	50
	DIN94-1,6X14-ST-A3P		
5315-12-180-3626	027073606	PIN,STRAIGHT,HEADLE	50
5305-12-184-2236	933998	SCREW,CAP,SOCKET,HE	20
	DIN7984-M6X16-8.8-A2C		
5310-12-356-0257	938351	WASHER,FLAT	50
5360-12-179-8255	027072402	SPRING,HELICAL,EXTE	50
5340-12-356-6976	027015702	LEVER,LOCK-RELEASE	20
5340-12-356-6977	027014302	BRACKET,DOUBLE ANGL	20
5340-12-356-6971	027017203	RECEPTACLE,FRICTION	20
5325-12-356-5396	909591449	INSERT,SCREW THREAD	50
5305-12-145-2079	933449	SCREW,CAP,SOCKET HE	50
	DIN912-M16X65-8.8-A3P		
2040-12-356-3619	024501103	STANCHION,DECK,RAIL	20
2040-12-356-3625	024501104	STANCHION,DECK,RAIL	20
5360-12-356-2241	909571259	SPRING,HELICAL,EXTE	50
4020-12-356-1915	024522603	FIBER ROPE	20
4010-12-356-1914	029660102	WIRE ROPE	20
5315-12-180-3616	027073613	PIN, PONTOON BOAT	20
5315-12-341-6612	942054	PIN,COTTER	50
	DIN94-4X63-ST-A3P		
4010-12-356-2780	027075603	WIRE ROPE ASSEMBLY	20
5340-12-179-7652	027076601	CLEVIS,ROD END	10
5310-12-174-3877	936601	NUT,PLAIN,HEXAGON	50
	DIN439-BM24-05-A2P		
5340-12-356-6956	116602	NUT,SLEEVE	50
	DIN1479-SP-M24-ST-A3P		
5310-12-179-8253	936600	NUT, PLAIN,HEXAGON	50
	DIN439-BM24LH-05-A2P		
5340-12-179-7654	027076602	CLEVIS,ROD END	10
5315-12-180-3618	027073627	PIN,STRAIGHT,HEADLE	20
5315-12-356-3958	940614	PIN,SPRI	50
3990-12-356-2554	027504002	PLATE,RAMP	12
4720-12-356-2080	909724854	HOSE ASSEMBLY,NONME	12

4720-12-356-2557	909721607	TUBING,NONMETALLIC	20
5310-12-327-0721	936637	NUT,PLAIN,HEXAGON	50
	DIN439-BM20-04-A2P		
5340-12-317-2253	935983 US	NUT,PLAIN,HEXAGON	50
	DIN1479-SPM20-X10CRNITI189		
5310-12-252-1067	936640	NUT,PLAIN,HEXAGON	50
5315-12-180-1372	940635	PIN,STRAIGHT,HEADLE	50
	DIN1481-5X40-1.4310		
5306-12-314-4873	027077201	BOLT,EYE	20
5360-12-317-7984	027077108	SPRING,HELICAL,EXTE	20
5340-12-357-4717	027010387	BUMPER,METALLIC	20
5305-12-342-0255	934114	SCREW,CAP,SOCKET HE0	100
	DIN7991-M10X40-10.9-A3P		
5340-12-357-4718	027010386	BUMPER,METALLIC	50